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## ABSTRACT

Part one of this two-part report focuses on the supplementary programs, partially funded under Titles I and IV of the 1965 Elementary Secondary Education Act, at Mary McLeod Bethune Elementary School. The faculty at Bethune chose to focus on the primary clusters--kindergarten, first, second, and third grades--for evaluation. Special emphasis was placed on instructional methods. The purpose of supplementary programs are to enhance and expand existing school services; to provide a vital link between school, parent, and community; and to help achieve the stated goals and objectives of the school. Bethune had four special programs: Title I, Title IV-A, Teacher Corps, and the Comprehensive Instructional Program. Part two of this report focuses on the supplementary programs, partially funded under Title I of the 1965 Elementary Secondary Education Act, at Thomasville Heights Elementary School. Four projects were utilized as resources in support of the instructional program: Comprehensive Instructional Program; E.S.E.A., Title I; Career Opportunities Program; and Instructional Assistance Program. Each of these projects contributed services designed to meet certain needs of the pupil population. At both schools, variables measured during the evaluation process included pupils' self-concept, academic achievement in reading, and openness of organizational climate. (Author/JM)

## [PUPIL PERFORMANCE IN THE ELEMENTARY SCHOOLS OF ATLANTA, GEORGIA.]

## RESEARCH AND DEVELOPMENT REPORT

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Vol. VI, No. 24May, 1973

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BETHUNE ELEMENTARY SCHOOL  
1971-72

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## I. RATIONALE

Mary McLeod Bethune Elementary School is located at 220 Northside Drive, N.W., at the corner of Thurmond Street. It is in the Vine City area of Atlanta, adjacent to an industrial area. According to original Title IV-A guidelines, 89 per cent of its pupils come from disadvantaged homes. The community is all black, and very low income. The houses are mainly substandard frame, and are overcrowded. There is only one small apartment complex within the school boundaries.

Bethune opened in 1885 under the name of Davis Street School. The present principal, Miss Dorothy Hornsby, was appointed in August, 1947. In 1956 the name was changed to honor the late educator, Mary McLeod Bethune. Between 1955 and 1968 enrollment ranged from 1,150 to 850. In 1960, fifteen classrooms, a reading clinic, and an office suite were added due to the large number of students. However, in January 1971, Kennedy Middle School opened, absorbing the sixth and seventh grades. That factor, coupled with encroaching industrial companies and the demolition of houses in the space now occupied by the Omni, has served to drop enrollment steadily over the past three years to its present number of 350.

Many problems associated with low-income urban areas can be identified at Bethune and reported in attendance figures, high mobility rates, and low standardized test scores. The mobility index, or rate of migration in and out of the school, was 24 per cent in 1970-71 and 21 per cent in 1971-72. The per cent of attendance was 90 in 1970-71 and 91 in 1971-72. This indicates a slight improvement in stability, but gains are still desirable. Although longitudinal evaluation of the standardized test scores was severely restricted, it was possible to determine relative position on national standards by looking at actual grade level placement, by grade, on the posttest. The scores as reported by the Metropolitan Achievement Tests (MAT) given in April, 1972, showed that reading deficits ranged from .585 years in the second grade to 1.732 years in the fifth grade.

The faculty at Bethune, under the leadership of the principal and the Title I lead teacher, chose to focus on the primary clusters -- kindergarten, first, second, and third grades -- for evaluation. Special emphasis was placed on instructional methods and a three-cluster design which made it possible to compare results of differential methods employed in the two primary clusters. Longitudinal data from standardized test gain scores will be used for only

the fifth grade, as comparable data are not available for the second, third, and fourth grades. This year's second grade took the Metropolitan Readiness Test (MRT) pretest as first graders, which yields a letter score, and the Metropolitan Achievement Tests (MAT) as posttest, which gives a grade equivalent. Therefore, a gain score is not reported. This year's third grade also took the MRT as a pretest when they were second graders, with the same result - no gain score reported. This year's fourth grade took the Iowa Test of Basic Skills as a pretest, and the MAT as a posttest. As conversion tables are not available, gain scores cannot be computed at this level either.

#### Supporting Projects

The purpose of supplementary programs is to enhance and expand existing school services; to provide a vital link between school, parent, and community; and to help achieve the stated goals and objectives of the school. Bethune had four special programs and services designed to provide enrichment and remediation to pupils sorely in need of experiential activities as well as basic cognitive development.

##### A. Title I

Title I is a federal project designed to provide compensatory education for deprived pupils. A lead teacher was funded under this program for 1969-70, 1970-71, and again for 1971-72. The kindergarten received two educational aides and pre-reading materials. Title I also provided some health services and a part-time social worker.

1. The lead teacher guided and aided in the development of the instructional program; identified pupils in need of compensatory education; identified instructional materials; tested and identified learning difficulties of the pupils; coordinated and interpreted the testing program of the school; conducted inservice training sessions for teachers and teacher aides as needed; assisted in classroom instruction; secured the services of area and community resource persons; interpreted the instructional program of the school to parents and interested community persons; and interpreted the Title I program.

2. The educational aides assisted the classroom teacher in performing clerical tasks; in preparing instructional aides; escorting pupils to the cafeteria, office, restrooms, on educational tours, etc.; corrected papers; tutored individual and small groups of pupils; and performed housekeeping tasks so that teachers could spend more time with children.
3. The social worker served as a liaison between the school and the home; attempted to remediate attendance, disciplinary, and social problems; and counseled pupils upon request of teacher or principal.

B. Title IV-A

Title IV-A is a federally funded program based on a "total family" approach to treating problems of the child and his education. Health, recreation and physical fitness, remediation, family counseling, cultural enrichment, arts and crafts, occupational training and family life skills, breakfast and snack, and library services are representative of the avenues which Title IV-A is creating to upgrade the quality of family life and community participation in childhood development. Eighty-nine per cent of the pupils enrolled at Bethune met Title IV-A criteria for low-income family educational assistance as defined by a sliding income scale which varies with family size.

Title IV-A provided preschool day care and extended day care for pupils so that parents might more easily get jobs or training to qualify for jobs and, very importantly, so that young children might receive stimulation and cognitive development during the critical early years. The community school or evening school for adults and older youths offered family enrichment courses such as sewing, child development, and industrial education. Food services, health services and a family service worker rounded out the supportive services of Title IV-A and were essential to the success of the program as a whole.

1. The lead teacher-community school director directed the day care center and provided leadership for the center staff. He conducted staff meetings, arranged schedules, and planned and maintained equipment and materials. He encouraged and developed community participation. He also directed the afternoon and evening enrichment programs. He worked under the direction of the principal in staffing, organizing, assessing needs, and implementing the program. He conducted daily planning sessions with the staff.
2. The family service worker was responsible for developing a parent involvement program. She assisted group leaders in working with parents and the health specialist in implementing the health program. She helped to organize and to plan with the parent advisory committee and parent volunteers.
3. The seven group leaders were responsible for small groups of children under the supervision of the lead teacher. They worked as a part of the child development team, supervising aides and working with professional staff and parents.
4. The twelve aides assisted in the care of a group under the direction of a group leader.
5. There were approximately six part-time teachers employed in the afternoon and evening hours teaching subjects such as reading, math, art and dancing, library, woodcraft and typing.

The Bethune IV-A program was designed to serve a total of 247 community participants: 80 preschool children in the comprehensive day care program, 125 school-age children in the extended day program, and 42 adults in the evening community school. A major concern was the desire to serve intact families. Vandalism was a problem at Bethune, particularly for the IV-A program, creating difficulties in implementation of certain aspects of the extended day program. Many of the tools, sewing machines, the washer-dryer, etc., were stolen, and delays in replacing these items were encountered.

C. Teacher Corps

The Teacher Corps, funded under Title V-B, trained college interns and graduate students in new classroom procedures, introduced team teaching approaches, and conducted inservice for all teaching clusters. The lead teacher and six interns worked as a team with the three senior classroom teachers in Primary Cluster I.

1. The lead teacher coordinated the interns and their organization into the Primary Cluster I program. She provided inservice to the interns and to the senior teachers in the cluster.
2. The interns planned and worked with the senior teachers in providing instruction for the pupils in the cluster. They identified their community project as training six parent tutors over their two-year internship at Bethune. Two parents were trained this year.

D. Comprehensive Instructional Program

The Comprehensive Instruction Program is a locally developed and funded project. Its purpose is to provide diagnostic measures and inservice training for teachers to insure pupil development in reading and math, and to define and establish a base professional competency level for teachers. Tests are provided teachers for diagnostic testing several times a year. CIP has also developed a set of Proficiency Modules which will help develop teaching skills in reading for all classroom teachers. Resource personnel are provided at the area office to interpret the reading and testing program for grades one through three, and to conduct inservice for teachers. During the first year of program implementation (1970-71), emphasis was placed on diagnostic teaching procedures in reading in grades one through three, and inservice training for teachers of reading. This year (1971-72), the project was extended to stress teaching procedures in reading in grades one through four, and concentrated on mathematics achievement in grades four and five.

## II. CRITICAL VARIABLES

The faculty and staff of Bethune, through observation of classroom behavior, play, and from testing results, have identified the following variables as those most critical to success in meeting the needs of their pupils.

- A. Reading achievement
- B. Math achievement
- C. Self-concept
- D. Team teaching
- E. Parental involvement
- F. Openness of school climate

## III. NEEDS OF THE PUPILS

The critical variables identified areas of desired program development and highlighted the following needs of the pupils:

- A. Cognitive
  - 1. Knowledge of basic skills
    - a. Natural phenomena
    - b. Time, spatial relationships
    - c. Familiar objects
  - 2. Achievement in
    - a. Development and mastery of basic skills in reading and arithmetic.
    - b. Develop of self-expressive skills
- B. Social-Emotional
  - 1. Self-control
  - 2. Acceptance by self, adults, and peers
  - 3. Recognition of behavior considered desirable or undesirable

4. Supportive family life
  - a. Interested parents
  - b. Family activities
  - c. Stability

C. Physical

1. Balanced diet
2. Periodic health services and physical examination
3. Responsibility in maintaining good health habits

IV. GOALS, BEHAVIORAL OBJECTIVES, AND DIAGNOSTIC MEASURES

In order to meet these needs and to evaluate the program and progress, the following goals, behavioral objectives and diagnostic measures were employed:

A. Goal

To make more progress with the team-teaching cluster than with the self-contained classroom cluster.

Objective

Pupils taught by the team-teaching approach will reveal more progress on the Metropolitan Achievement Tests than pupils taught in self-contained classrooms.

Diagnostic Measure

The Metropolitan Achievement Tests. In the first and second grades, comparison was made between posttest scores of children in the team-teaching cluster and those in the self-contained classroom cluster.

B. Goal

To improve academic achievement of the pupils, especially in the areas of reading and mathematics.

Behavioral Objective

Eighty-five per cent of the first grade pupils will score 1.7 or more in reading and mathematics on the Metropolitan Achievement Tests, Primary I, Form F.

Behavioral Objective

Eighty-five per cent of the second and third grade pupils will progress .7 or more in reading and mathematics between pre- and post-test administration of the Metropolitan Achievement Tests, Primary I and II, Forms F and G.

C. Goal

To develop within each child a more positive self-concept; self-reliance; sense of personal worth, freedom and belonging; and more positive attitude toward school.

Behavioral Objective

Eighty-five per cent of the first, second, and third grade pupils will score above the mean score of other Atlanta children in the first, second, and third grades.

Diagnostic Measure

The Self-Appraisal Inventory.

D. Goal

To increase parental involvement in school activities.

Behavioral Objective

Parents will be represented on all advisory committees and will serve as voluntary helpers when needed.

Diagnostic Measure

Committee membership was studied to ascertain parental participation, and teachers and administrators will have records of volunteer parental assistance.

**E. Goal**

To increase openness of the school climate

**Behavioral Objective**

The longitudinal view of the school climate will show more openness.

**Diagnostic Measure**

Mean scores on the six factors of the Organizational Climate Index.

**V. ORGANIZATION AND CONTROL**

The organization of the Atlanta Public Schools is administered by the Superintendent of the Atlanta Public Schools, who is appointed by the Board of Education and is authorized by the board to administratively direct the instructional program of the school system. There are five area superintendents who, under the guidance of the superintendent, are administratively responsible for all school programs. The area superintendent of each geographical area supervises principals of the schools in that area. Also, within the organizational structure of the local school system, there are six assistant superintendents who direct the six divisions of supportive services to the instructional program. The four divisions having the most direct impact on the instructional opportunities provided to children were: (1) Research and Development, (2) Instruction, (3) Personnel, and (4) Administrative Services.

The Assistant Superintendent for Research and Development and his staff were responsible for developing new programs, evaluating the effectiveness of program activities, and disseminating information.

The Assistant Superintendent of Staff Personnel Services and her staff assumed the responsibility of meeting the staffing needs of the instructional programs within the schools and project activities.

Inservice training for teachers, staff development, and curriculum development were directed by the Assistant Superintendent for Instruction and his staff. Within this division, the directors and coordinators of federal, state, and local projects and various curriculum areas worked with the staff of the other divisions, the area superintendents, the principals, and the teachers to implement programs and provide for the training needs of the school personnel.

The Area Superintendent and his staff were administratively responsible for the school within a specific geographic area. His staff supervised and worked directly with the local school staff in implementing the instructional program of the school.

In addition to the principal, who was responsible for administrative aspects of the school program at the local level, and the fourteen classroom teachers who were directly responsible for classroom instruction and assessment of pupils, other personnel serving the school included a librarian, and parttime teachers in music, speech, band, and art.

## VI. PROCESS

In the fall, 1971, in both primary clusters, teachers identified individual children who scored below grade level on the Metropolitan Achievement Tests, and those who scored "C" or below on the Metropolitan Reading Readiness Test (MRT), so that attempts at intervention and remediation could be made. Primary Cluster I was composed of the Teacher Corps unit and three senior teachers. The senior teachers were each assigned a heterogeneous homeroom, by grade, for initial instructional purposes. Under coordination of the Teacher Corps lead teacher, an intern was assigned to each senior teacher and the team moved first into ungraded ability groups for language arts, and then for mathematics. As pupils and teachers learned to work in the ungraded situation, other disciplines were introduced into the approach. Learning centers were organized in each classroom, and a special resource learning center was operated by the lead teacher and two rotating interns. Two additional classrooms were available for small group instruction. Children changed classes for instruction with teachers at their ability level, so that a child might be in a third level reading class, and first level science, etc. The Cluster I team planned together at regular weekly intervals to list curricula activities, assign responsibilities, make long range plans, discuss individual children and problems, and share ideas.

In Cluster II, each teacher was assigned a specific grade. With the exception of music and library instruction, the pupils remained with their homeroom teacher all day. They were grouped, within each class, for reading instruction according to test scores and reading progress records. Pupils were regrouped for mathematics instruction according to mathematics test scores and teacher judgment. An educational aide assisted the first and second grade classrooms in this cluster. The aide occasionally tutored an individual pupil or a small group away from the regular classrooms.

Activities schedules for the primary clusters are shown here:

Schedule for Primary Cluster I

8:30 - 9:00	Preparations for day: Attendance, Reports, Collection of monies, News, Sharing
9:00 - 11:00	Language Arts Groups -- Reading, Writing, and English
11:00 - 11:30	Lunch
11:30 - 12:00	Physical Education
12:00 - 1:00	Mathematics
1:00 - 2:00	Social Studies and Science
2:00 - 3:00	Art and Creative Activities

Schedule for Primary Cluster II

8:30 - 9:00	Preparation for day: Attendance, Reports, Collection of monies, News, Sharing
9:00 - 11:00	Language Arts Groups -- Reading, Writing, and English
11:00 - 11:45	Lunch
11:45 - 12:30	Supervised Activities, Games, Physical Education, Art
12:30 - 1:45	Mathematics
1:45 - 2:45	Social Studies and Science
2:45 - 3:00	Evaluation, Housekeeping, Dismissal

It can be seen that the schedules were quite similar, but Cluster I had a regular art and creative development period which Cluster II did not. Music and library classes were scheduled once a week for each class or homeroom.

In terms of actual curriculum development and presentation, objectives for reading and mathematics were formulated by the teachers and stated behaviorally. The Houghton-Mifflin Basal Reading Series and accompanying supplementary materials were used throughout the grades. Reading levels were assigned to each book in the series, so that pupils progressed through a series of levels rather than by grade. A non-graded mathematics series American's Mathematics in Action was used throughout the grades. A variety of correlated material, films, filmstrips, records, games, charts, and teacher-made materials were used with both series.

The staff at Bethune, guided by the variables identified as critical to cognitive and social development, prepared a variety of activities to stimulate growth, which were supplementary to regular text book instruction. No one teacher, of course, used all of these but they are representative of the activities the majority of the staff added to the regular curriculum.

- A. Behavior modification techniques employed use of merit charts to improve conduct and achievement; praise by teachers (first graders were sent to the principal for special praise); and tokens which were traded by the children for candy, toys, or special activity. Undesirable behavior was ignored or not reinforced.
- B. Field trips were used extensively to broaden pupils experiential background and to improve self-concept.
- C. Pupils were encouraged in writing original compositions, and in oral expression and story-telling. Stories and experiences were dramatized.
- D. Photographs of daily activities were used to encourage the pupils, to spark interest, and to aid in development of self-concept. Art activities were integrated into reading and mathematic lessons.
- E. Interesting learning centers were set up and open to pupils. Library use was encouraged.
- F. Constructive after-school activities were provided by the extended day program, clubs, and scouts.

The Title I lead teacher and one aide worked to provide tutorial and individual instruction to pupils in grades one through five who were limited in basic reading skills. This service was in addition to activities offered by the regular school program. Besides direct classroom assistance they worked with teachers, planned inservice activities, and aided children in the reading laboratory. The lead teacher also assisted with such activities as testing, tutorial programs, attendance problems, and parental involvement activities.

Bethune had approximately 62 children in kindergarten. Two Title I aides were assigned to the kindergarten teacher to reduce the pupil-teacher ratio to 1:15 so that pupils from low-income families who lacked prereading skills and social behaviors necessary for success in school could receive more individual instruction.

Five classrooms and an office space in one wing were assigned for the Title IV-A preschool program. Renovations were completed, and staff, equipment and supplies provided in order to be licensed by the Department of Family and Childrens Services. A lead teacher, four group leaders, and seven aides worked with the children in classes set up for age-relevant activities. The family service worker made approximately ten home visits per week, familiarizing parents with their children's program, and services available for the total family. Some services offered were after-school activities for school-age children, evening classes for adults, health and medical services, and referral to any other community agencies for which they qualified. The preschool program day care center was open from 7:30 a.m. until 6:00 p.m. five days a week. The extended day program for school-age children ran from 3:00 until 6:00 p.m. five days per week. The evening school classes were conducted from 7:00 until 10:00 p.m. five nights a week with baby sitting services provided for those parents requiring it.

The day care center at Bethune enrolled an average of 80 children between the ages of two and five during 1971-72. The center opened in June, 1971. The active enrollment and average daily attendance for September, 1971, are shown below.

September Day Care Enrollment and Attendance

	<u>Age Two</u>	<u>Age Three</u>	<u>Age Four</u>
Attendance	17.1	17.4	33.4
Enrollment	20	20	40

The average daily attendance for extended day in September was 70.3 out of an active roll of 84.

Inservice activities were carried on at regular weekly staff meetings conducted by the principal and Title I lead teacher. They covered areas such as: (1) writing of behavioral objectives for classroom instruction in reading and mathematics; (2) assessment of pupils -- purpose, teacher-made tests, standardized tests, diagnostic tests, and use of test results; (3) orientation to theory of behavior modification; (4) team teaching; (5) theory of non-graded instruction, and reaction to experiences in using the non-graded approach; and (6) use of performance contracts to further individualize instruction.

Plans were made for future inservice activities in: (1) development of pupils skill and transfer of acquired skills to reading and the content areas; (2) teaching reading in the content areas; (3) ways parents may assist in the school's program -- especially in reading and mathematics; (4) workshops for parent assistance; (5) use of reading, mathematics, and science interest and learning centers within and away from the classroom.

In summary, Bethune's main thrust this year was in the two primary clusters, kindergarten, first, second, and third grades, towards individualized instruction and development of the team-teaching approach. Integration of Title IV-A and Title I activities into the main educational program were of primary importance.

## VII. EVALUATION

### Research Design

The general research design was set up to take the beginning and end points of academic achievement and social-emotional development during the school year and to evaluate progress and change made during that interval. Procedures used in this task were:

1. The scores of first grade pupils on the Metropolitan Readiness Test (MRT) given in the fall were compared to scores on the Metropolitan Achievement Tests (MAT) given in the spring, to see if those scoring "C" or above on MRT did, in fact, score 1.6 or better at the end of the first grade.

2. Data from the pretest/posttest administration of the Metropolitan Achievement Tests were used to evaluate gains in reading and mathematics. Comparison was made between gains made in Primary Cluster I and Primary Cluster II. Mean grade gains of 1971-72 were compared to those of 1970-71, and differences, especially increases, analyzed for causal relationships to school program.
3. Attendance figures were used to determine if any relationship existed between achievement and attendance.
4. Data from a spring administration of the Self-Appraisal Inventory (SAI) and the School Sentiment Index (SSI) were to have been compared to the city-wide mean score, to show effects of Title I English-Reading and of Title IV-A enrichment programs on the self-concept of disadvantaged pupils. However, a city-wide norm was not established, and as a pretest/posttest design was not used, scores have no relative meaning and are reported as percentages of positive responses. Scores above 50 per cent were deemed acceptable by index of acceptability standards in evaluation.
5. Scores of the Southern Regional Education Board (SREB) checklist were reported as percentages and evaluated for the effects of Title IV-A programs on preschool children.
6. The Organizational Climate Index (OCI) was administered to a randomly selected sample of teachers and the data compared to the 1970-71 results.

### Findings

#### Academic Achievement in Reading and Math

The data showing the performance of first grade pupils on the MRT and the reading subtest of the MAT are presented in Table 1.

According to the data, twenty-six pupils scored "C" or above and twelve scored "D" on the MRT. Of the twenty-six whose scores indicated readiness for first grade work, only thirty-two per cent scored 1.6 or above on the MAT.

TABLE 1

SUMMARY OF PUPIL PERFORMANCE ON THE METROPOLITAN READINESS TESTS AND THE METROPOLITAN ACHIEVEMENT TESTS READING SCORES  
 FIRST GRADE  
 N = 38

<u>Group</u>	<u>Number (S<sub>3</sub> Population)</u>	<u>MAT SCORES</u>			
		<u>1.6 or Above No.</u>	<u>Per Cent</u>	<u>1.0 -- 1.5 No.</u>	<u>Per Cent</u>
Scored "C" or above on MRT	26	12	32	14	37
Scored "D" on MRT	12	1	3	11	28
<b>TOTAL</b>	<b>38</b>	<b>13</b>	<b>35</b>	<b>25</b>	<b>65</b>

The distribution of scores on both tests is presented in Table 2.

The table shows that 57 per cent of the students scoring "B" on the MRT, scored 1.6 or better on the MAT, while 33 per cent of those scoring "C", and only eight per cent of those scoring "D", achieved the 1.6 level on the MAT.

TABLE 2

DISTRIBUTION OF LETTER RATING AND READINESS STATUS CORRESPONDING  
TO VARIOUS RANGES OF TOTAL SCORE ON THE METROPOLITAN READINESS  
TESTS AND THE METROPOLITAN ACHIEVEMENT TESTS. READING SCORES  
FIRST GRADE 1971-72 -- N = 38

Score No.	Range -0- Above 75	Letter Rating A	Readiness Status Superior	Posttest	
				1.6 or Above -0-	1.0-1.5 -0-
14	64 -- 75	B	High Normal	Apparently very well prepared for first grade work. Should be given opportunity for enriched work in line with abilities.	
12	45 -- 63	C	Average	Good prospects for success in first grade work provided other indications such as health, emotional factors, etc., are consistent.	8      6
12	24 -- 44	D	Low Normal	Likely to succeed in first grade work. Careful study should be made of the specific strengths and weaknesses of pupils in this group and their instruction planned accordingly.	4      8
-0-	Below 24	E	Low	Likely to have difficulty in first grade work. Should be assigned to slow section and given more individualized help.	1      11
				Chances of difficulty high under ordinary instructional conditions. Further readiness work, assignment to slow sections, or individualized work is essential.	-0-      -0-

Analysis of reading scores for grades two, three and five are shown in Tables 3, 4, and 5. A major goal at Bethune was to determine if the team-teaching approach would elicit significantly higher achievement scores. Accordingly, data from grades two and three in Primary Cluster I (team-taught) were compared to grades two and three in Primary Cluster II, (self-contained). As Table 3 shows, mean reading gains in the second grade were equal, but 38 per cent of the pupils in Team Teaching (TT) had at least one month gain for one month instruction, while only 24 per cent of the pupils in Self-Contained classes (SC) had this gain. In math, although the TT pupils did slightly better, the difference was not significant. However, 50 per cent of the pupils in TT had at least one month gain for one month instruction, while only 29 per cent of the pupils in SC achieved that goal.

TABLE 3  
ANALYSIS OF MEAN GAIN SCORES  
TEAM TEACHING VERSUS SELF-CONTAINED  
GRADE TWO

	Team Teaching		Self-Contained		Diff	df	<u>t</u> Statistic
	N	Mean Gain	N	Mean Gain			
a. Reading	16	.43	17	.43	0	33	0
Math	16	.56	17	.44	.12	33	.713
Percentage of Frequency of Gain Scores							
b.	<u>Team Teaching</u>	0	.1 - .3	.4 - .5	.6		
	Reading	6	50	6	38		
	Math	13	31	6	50		
	<u>Self-Contained</u>	0	.1 - .3	.4 - .5	.6		
	Reading	18	29	24	29		
	Math	24	35	12	29		

In the third grade, the TT pupils made lower gains than the SC pupils in both reading and math. The difference was significant at the .01 level. Table 4 shows the actual mean gains, the *t*-statistic, and the frequencies. In reading, only 26 per cent of the TT pupils had gains at or above the .6 level (one month instruction = one month gain) while 90 per cent of the pupils in SC gained at least .6. In math, 47 per cent of pupils in TT and 90 per cent of pupils in SC achieved .6 or better gain.

TABLE 4  
ANALYSIS OF MEAN GAIN SCORES  
TEAM TEACHING VERSUS SELF-CONTAINED  
GRADE THREE

	Team Teaching			Self-Contained			Diff	df	<i>t</i> Statistic
	N	Mean	Gain	N	Mean	Gain			
a. Reading	21	.34		21	.89		.55	40	4.089**
	Math	21	.41	21	.91		.50	40	4.591**
Percentage of Frequency of Gain Scores									
b.	<u>Team Teaching</u>		0	<u>.1 - .3</u>			<u>.4 - .5</u>		.6
	Reading	14		43			19	24	
	Math	19		33			5	43	
	<u>Self-Contained</u>		0	<u>.1 - .3</u>			<u>.4 - .5</u>		.6
	Reading	0		0			10	90	
	Math	0		0			10	90	

\*\*Significant at the .01 level.

Combined scores for the TT and SC are reported in Table 5. Due to the large differences in the third grade, the combined grade gain score difference in reading was significant at the .01 level. The SC pupils reading gains were significantly higher. The difference in gains in math was not significant. It can be seen in Table 3 that the greatest number of pupils in TT were in the .1 - .3 range of gain, while a majority of pupils in SC were in the .6 or more in gain. However, the TT group had nearly as many scoring .6 or more in gain, as scored in the .1 - .3 range.

TABLE 5

ANALYSIS OF MEAN GAIN SCORES  
TEAM TEACHING VERSUS SELF-CONTAINED  
GRADES TWO AND THREE

	Team Teaching		Self-Contained		Diff	df	<u>t</u> Statistic
	N	Mean Gain	N	Mean Gain			
a. Reading	37	.38	38	.68	.30	73	3.139**
Math	37	.47	38	.70	.23	73	2.137
Percentage of Frequency of Gain Scores							
b.	<u>Team Teaching</u>	0	.1 - .3	.4 - .5	.6		
	Reading	11	46	13	30		
	Math	16	33	5	46		
	<u>Self-Contained</u>	0	.1 - .3	.4 - .5	.6		
	Reading	8	16	16	60		
	Math	10	10	10	64		

\*\*Significant at the .01 level.

#### Attendance

Table 6 shows the computed correlation between mean reading gain and attendance. There was no significant correlation found in any grade. In fact, grade 5 had the highest percentage of attendance and the lowest gain score.

TABLE 6  
CORRELATION BETWEEN READING GAIN AND ATTENDANCE  
FOR GRADES TWO, THREE AND FIVE

Grade	Mean Reading Gain	Per Cent Attendance	df	Correlation Coefficient
2	.43	97	31	.13
3	.64	95	39	.17
5	.08	98	55	.12

## Effectiveness and Acceptability

The Division of Research and Development conducted a study of the effectiveness and acceptability of each Atlanta Public School's elementary reading program in 1970-71 and of the reading and arithmetic program in 1971-72. The findings are presented in a report entitled "Effective? Acceptable?", 1971 and 1972. Summary data concerning Bethune are shown in Table 7 (Reading) and Table 8 (Mathematics).

Effectiveness is the relationship between actual gain and predicted gain, and the predicted index of the gain rate of effectiveness is based on a formula including six factors: (a) prior academic achievement as determined by the MAT; (b) socio-economic level of the pupil as indicated by the per cent of paid lunches; (c) stability of the pupils as measured by the mobility rates; (d) per cent of attendance; (e) pupil-teacher ratio; and (f) per cent of passing pupils. Variations from predicted scores, then, should be from sources other than those above, as they are controlled for in the formula. Based upon the degree to which these influencing factors were present in the school, some gains were predicted which were less than the acceptable gain of one month per month of instruction. Therefore, a grade may often be effective and not acceptable.

Acceptability shows the relationship between level of performance and national norms.

Table 7 shows that in reading, across the past two years, only the third grade has improved its gain rate of effectiveness and maintained its index of acceptability. The fifth grade's gain score was minimal and its gain rate of effectiveness and index of acceptability both dropped. So, while the second and third grade both made significant gain scores in 1971-72, they were not at an acceptable level of performance, and the fourth and fifth grades were neither effective nor acceptable. As the longitudinal data shows, last year's fourth grade was very effective, while the same children (to a large extent) were extremely ineffective this year. Last year's third graders also dropped this year as fourth graders. Because of mobility, and therefore a limited number of children who were present for pre- and post-tests both years, it is difficult to say whether the causal factors lie in the children (doubtful), the program, or other extenuating circumstances (unknown). What is ominous is the downward trend of the upper grades, and the poor performance of the TT Primary Cluster I. The TT program is developmental in nature, and as the concept was planned to encompass a two-year period, gains in 1972-73 are expected to improve a great deal.

TABLE 7

LONGITUDINAL PROFILE OF EFFECTIVENESS AND ACCEPTABILITY  
OF THE READING PROGRAM, 1970-71 AND 1971-72

Year and Grade	Pre	Post	Gain		Gain Rate of Effectiveness	Index of Acceptability	Pre/Post 1971-72 <sup>a</sup>	
			Predicted	Actual			df	t Statistic
<b>2</b>								
1970-71	1.44	1.86	.4	.42	100	67		
1971-72	1.59	2.02	.4	.43	100	63	32	4.05**
<b>3</b>								
1970-71	1.83	2.46	.6	.63	100	65		
1971-72	1.81	2.45	.4	.64	150	65	40	4.649**
<b>4</b>								
1970-71	2.61	3.32	.4	.71 <sup>b</sup>	150	64		
1971-72	2.46	3.06	.7	.60	86	62		
<b>5</b>								
1970-71	3.48	3.90	.5	.42	140	65		
1971-72	3.69	3.77	.6	.08	33	60	56	.928

\*\*Significant at the .01 level.

<sup>a</sup>All data are based on subgroup S<sub>3</sub>, those pupils taking both the pre- and post-test.

<sup>b</sup>The fourth grade was given the Iowa Test of Basic Skills (ITBS) as a pretest in 1971-72. The Effective-Acceptable data was computed for the period from April, 1971, to April, 1972.

In Table 8, the profile of mathematics gains shows that the second, third and fifth grades were effective and closer to acceptability than in the reading scores. However, the fourth grade did poorly in this area as well as in reading. Grades two, three and five made gains significant at the .01 level.

TABLE 8  
PROFILE OF EFFECTIVENESS AND ACCEPTABILITY  
OF THE ARITHMETIC PROGRAM, 1971-72

Grade	<u>Gain S<sub>3</sub></u>		Gain Rate of Effectiveness	Index of Acceptability	<u>Prepost S<sub>3</sub><sup>a</sup></u>	
	Predicted	Actual			df	t Statistic
2	.5		108	72	31	6.348**
3	.5	.56 <sup>b</sup>	112	69	40	7.404**
4	1.1	.60 <sup>b</sup>	55	66	-	-
5	.3	.35	117	81	56	3.492**

\*\*Significant at the .01 level.

<sup>a</sup>All data are based on subgroup S<sub>3</sub>; those pupils taking both the pre- and post-tests.

<sup>b</sup>The fourth grade was given the Iowa Test of Basic Skills as a pretest in 1971-72. The Effective-Acceptable data is computed over the period from April of 1971, to April of 1972.

Based on data in Tables 5 and 6, Bethune pupils performed in reading at approximately 63 per cent of the national norm, and in mathematics at 72 per cent of the national norm.

## Self-Concept

To assess self-concept, the Self-Appraisal Inventory, developed by the Instructional Objectives Exchange, was administered to a random sample of 37 pupils; four students each in the kindergarten, first and second grades, and 25 third graders. It is recognized that pupil attitudes and motivation are important factors in learning, and that measuring the affective area of education is a somewhat difficult but needed dimension for comprehensive pupil evaluation. As a proposed city-wide norm was not established, and a pretest/posttest design not used, Bethune's scores have no meaning relative to anything else other than their inherent value. By index of acceptability standards, for this inventory, scores above 50 per cent were deemed acceptable. According to the data in Table 9, the pupils in each grade had an acceptable level of self-esteem on all scales.

TABLE 9  
PER CENT POSITIVE RESPONSE ON THE  
SELF-APPRAISAL INVENTORY

Grade	N	School	Peer	General	Family	Total
K	4	62.5	53.8	58.3	54.2	57.5
1	4	60.4	67.3	61.1	70.8	64.4
2	4	79.2	63.5	83.3	62.5	72.5
3	25	75.0	69.5	71.6	57.3	69.8

## Child Development

The preschool program at Bethune was one of the first Title IV-A programs in Atlanta, and considerable attention has been paid to its development and effect. The program began in June, 1971. The initial rating was administered within six weeks of enrollment. The second rating was given in the spring, only to students who had been enrolled for at least six months. The form given was determined by the age of the child. The initial and six months ratings were not given to the same groups of children, and the data cannot be considered a pretest/posttest design, so the t-test of proportions was used to measure significance of differences. As can be seen in Table 10, the children in the six-month group scored significantly higher on the cognitive

and motor skills areas at all age levels. There was no significant difference on the hygiene and self-help factors at the two- and three-year-old levels, mainly because the initial ratings were very high. What is most important to note is the great increase in positive observations on the cognitive scale at all three age levels. It is this area that will be of most interest in future studies using longitudinal data. Copies of the S.R.E.B. rating scales are in Appendix A.

TABLE 10

PER CENT POSITIVE OBSERVATIONS ON THE  
SOUTHERN REGIONAL EDUCATION BOARD  
RATING FORM FOR PRESCHOOL AGE CHILDREN

Form B - Two-Year Olds	Initial Rating	Six-Month Rating	<u>t</u>	
	<u>N = 14</u>	<u>N = 13</u>	<u>df</u>	<u>Statistic</u>
Cognitive	55.7	97.7	268	9.55***
Social-Emotional	78.6	87.0	79	1.01
Motor Skills	88.5	100.0	214	3.815***
Hygiene and Self-Help	94.4	98.4	133	1.267
 Form C - Three-Year Olds				
	<u>N = 17</u>	<u>N = 16</u>		
Cognitive	50.9	95.5	262	9.567***
Social-Emotional	81.0	98.5	130	3.504***
Motor Skills	51.6	87.6	262	7.319***
Hygiene and Self-Help	93.2	98.0	196	1.671
 Form D - Four-Year Olds				
	<u>N = 19</u>	<u>N = 27</u>		
Cognitive	32.7	94.5	918	2.378***
Social-Emotional	86.8	98.7	688	5.714***
Motor Skills	58.8	82.0	362	4.862***
Hygiene and Self-Help	85.0	97.6	362	4.094***

\*\*\*Significant at the .001 level.

Table 11 summarizes health service activities carried out with Title IV-A funds during the year and the agency or person providing the services.

TABLE 11

SUMMARY OF HEALTH SERVICE ACTIVITIES AT  
THE CHILD DEVELOPMENT CENTER

<u>Type of Services Rendered</u>	<u>Number of Children Tested</u>	<u>Number of Defects Found</u>		<u>Ratio: Children: Defects</u>	<u>Doctor or Agency</u>
		<u>Defects</u>	<u>Found</u>		
Physical Examination	76	0	0	0:76	Dr. John Stephenson
Vision Screening	35	1	1	1:35	Mrs. Cruseil
Hearing Screening	-	-	-	-	
Urinalysis	78	1	1	1:78	Bethune Child Development Center
Hematocrits (Anemia)	82	2	2	1:41	Mr. Porter, Health Center
Height and Weight	79	0	0	0:79	Bethune Child Development Center
Tuberculin Skin Test	-	-	-	-	
Dental Care	76	17	17	1:4.8	Dr. Johnson and Dr. Gulley
Other	-	-	-	-	

REFERRALS

<u>No. of Children</u>	<u>Reason For Referral</u>	<u>Agency or Doctor Referred To</u>	<u>Disposition</u>	<u>Follow-up Status</u>
			<u>Eye examination</u>	
1	Vision acuity was not normal acuity of a four year old.	Dr. Proctor	Corrective lenses	Under treatment

## Openness of School Climate

A random sample of teachers was asked to complete, anonymously, the Organizational Climate Index (OCI), developed by George Stern of Syracuse University.

OCI presents the respondent with 300 statements which he is to answer true or false as applicable to his school. After compilation, the items on the OCI provide data from the respondent on thirty need-press scales postulated by Henry A. Murray and his associates at Harvard University in 1938. Further analysis of these data produces six OCI factors which are called first-order factors. The first five first-order factors describe a second-order factor called "development press" which is the capacity of the organizational environment to support, satisfy, or reward self-actualizing behavior. Another second-order factor, "control press," described by impulse control, refers to those characteristics of the environment which inhibit or restrict personal expressiveness. A copy of Murray's Need-Press Scales and a copy of the six OCI factors with their definitions are presented in Appendix B.

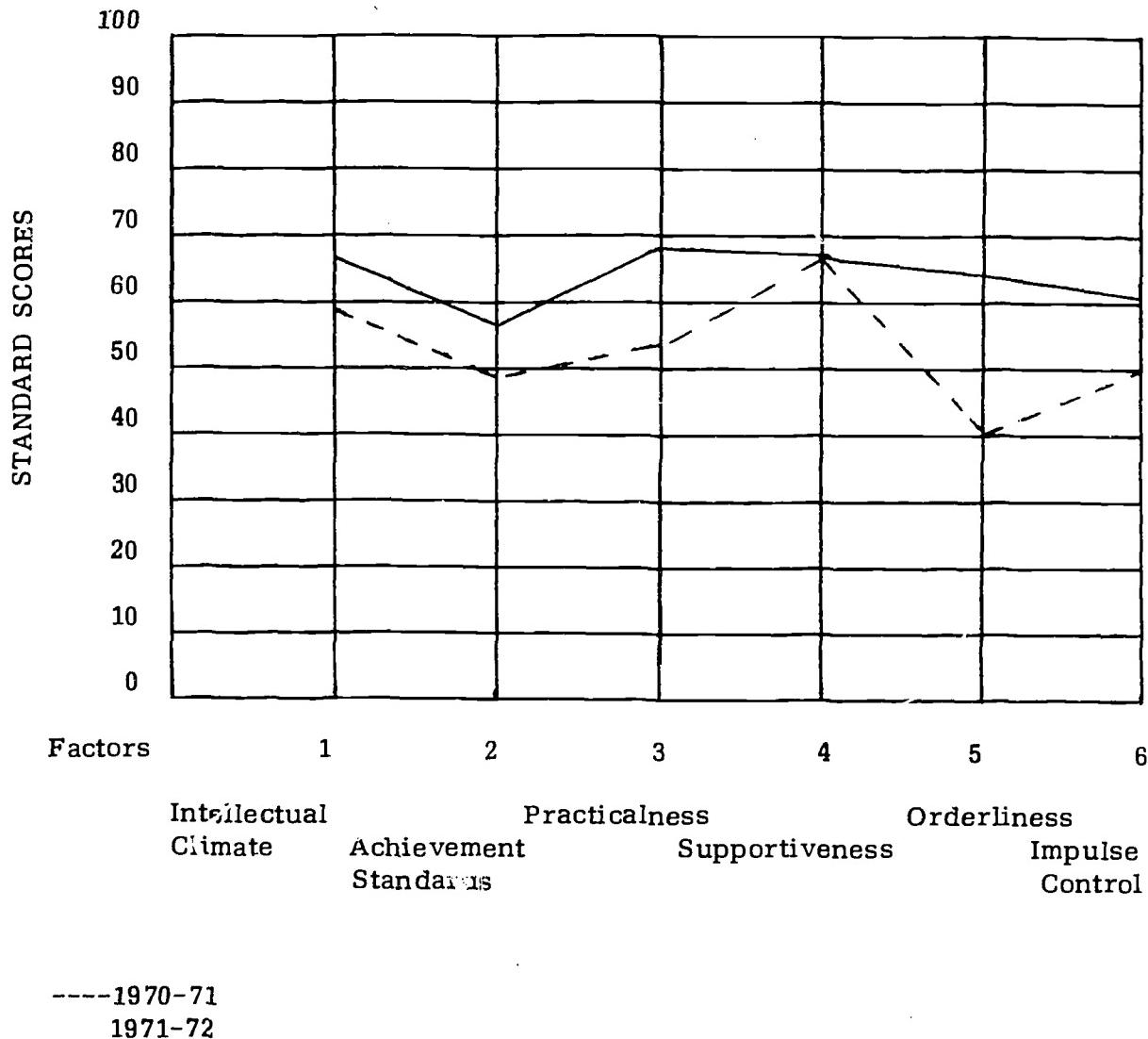
Presented in Table 12 are data on the organizational climate at Bethune for a two-year period, converted to standard scores. Before conversion, a negative lower score on Factor 6 indicated that teachers perceived the climate as being more open. Conversion of the raw score on each factor to standard score erased the negative loading of Factor 6. Consequently, the higher the score on each factor, the more open the climate.

TABLE 12  
 SCHOOL PROFILE OF STANDARD FACTOR SCORES ON  
THE ORGANIZATIONAL CLIMATE INDEX  
 1970-71 - 1971-72

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The 1971-72 mean scores were higher than the 1970-71 mean scores on all factors, thus the over-all climate seemingly was more open in FY72 than in FY71. The greatest mean increase was found on Factor 5, Orderliness, and the least mean increase was found on Factor 4, Supportiveness.

In the general OCI study, which included 28 schools, an intercorrelation matrix, including the OCI factor scores, reading achievement scores, and per cent of attendance, was computed. No significant correlation was found between achievement and the degree of openness of climate.

### VIII. COST ANALYSIS

The data presented in Table 13 show the relative cost for a one-grade-unit of reading gain, based upon the rate of gain for FY72 and the amount spent. Data for these computations came from the General Funds Report, June, 1972, and the Trust and Agency Report, June, 1972. From the expenditure figures, estimates were made of the per-pupil cost from general funds and from special projects or compensatory funds. These data also show the cost in compensatory funds for each unit of effectiveness, as determined in the Effective? Acceptable? study, 1972. These data are not exact or refined, but broad estimates based upon information obtained from the school staff relative to utilization of resources.

No grade-unit gain cost was calculated for the kindergarten, first, or fourth grades because of testing procedures (discussed on page 2). The total per-pupil expenditures for general and special funds were the same in each grade, but the projected cost for a one-grade-unit of gain varied tremendously across grades and the expenditure (per ADA) of compensatory funds per each unit of effectiveness ran from a low of \$4.64 in the third grade to a high of \$21.09 in the fifth grade. This indicates that the amount of compensatory funds spent did not influence the effectiveness of the reading program.

TABLE 13

COST ANALYSIS OF READING GAINS BY GRADES  
TOTAL SCHOOL AVERAGE DAILY ATTENDANCE (ADA)  
GRADES K - 5 N = 323

	Grades			
	<u>Second</u>	<u>Third</u>	<u>Fifth</u>	<u>Average</u>
ADA	47	48	66	
<u>Per Pupil Cost</u>				
<u>A. General Funds</u>				
1. Regular				
a. Salary	\$ 853.41	\$ 853.41	\$ 853.41	\$ 853.41
b. Non-Salary	<u>136.66</u>	<u>136.66</u>	<u>136.66</u>	<u>136.66</u>
c. Total	<u>\$ 990.07</u>	<u>\$ 990.07</u>	<u>\$ 990.07</u>	<u>\$ 990.07</u>
2. CIP				
Non-Salary	\$ 2.41	\$ 2.41	\$ 2.41	\$ 2.41
3. Total General Funds				
a. Salary	\$ 853.41	\$ 853.41	\$ 853.41	\$ 853.41
b. Non-Salary	<u>139.07</u>	<u>139.07</u>	<u>139.07</u>	<u>139.07</u>
c. Total	<u>\$ 992.48</u>	<u>\$ 992.48</u>	<u>\$ 992.48</u>	<u>\$ 992.48</u>
<u>B. Special Funds</u>				
1. National Teacher Corps				
a. Salary	\$ 121.08	\$ 121.08	\$ 121.08	\$ 121.08
b. Non-Salary	<u>1.60</u>	<u>1.60</u>	<u>1.60</u>	<u>1.60</u>
c. Total	<u>\$ 122.68</u>	<u>\$ 122.68</u>	<u>\$ 122.68</u>	<u>\$ 122.68</u>
2. E.S.A.P.				
a. Salary	\$ 1.17	\$ 1.17	\$ 1.17	\$ 1.17
b. Non-Salary	<u>.99</u>	<u>.99</u>	<u>.99</u>	<u>.99</u>
c. Total	<u>\$ 2.16</u>	<u>\$ 2.16</u>	<u>\$ 2.16</u>	<u>\$ 2.16</u>
3. Title IV-A				
a. Salary	\$ 404.31	\$ 404.31	\$ 404.31	\$ 404.31
b. Non-Salary	<u>79.65</u>	<u>79.65</u>	<u>79.65</u>	<u>79.65</u>
c. Total	<u>\$ 483.96</u>	<u>\$ 483.96</u>	<u>\$ 483.96</u>	<u>\$ 483.96</u>
4. Title I				
a. Salary	\$ 84.57	\$ 84.57	\$ 84.57	\$ 84.57
b. Non-Salary	<u>2.60</u>	<u>2.60</u>	<u>2.60</u>	<u>2.60</u>
c. Total	<u>\$ 87.17</u>	<u>\$ 87.17</u>	<u>\$ 87.17</u>	<u>\$ 87.17</u>
5. Total Special Funds				
a. Salary	\$ 611.13	\$ 611.13	\$ 611.13	\$ 611.13
b. Non-Salary	<u>84.84</u>	<u>84.84</u>	<u>84.84</u>	<u>84.84</u>
c. Total	<u>\$ 695.97</u>	<u>\$ 695.97</u>	<u>\$ 695.97</u>	<u>\$ 695.97</u>
<u>C. TOTAL</u>	<u>\$1,688.45</u>	<u>\$1,688.45</u>	<u>\$1,688.45</u>	<u>\$1,688.45</u>
Rate of Reading Gain (Per Cent)	69	104	13	56
<u>Projected Cost For One-Grade-Unit Gain</u>				
A. General Funds	\$1,438.38	\$ 954.31	\$ 7,634.46	\$1,772.29
B. Special Funds	<u>1,008.65</u>	<u>669.20</u>	<u>5,353.62</u>	<u>1,242.80</u>
C. Total	<u>\$2,447.03</u>	<u>\$1,623.51</u>	<u>\$12,988.08</u>	<u>\$3,015.09</u>
Gain Rate of Effectiveness	100	150	33	92
Expenditure (Per ADA) of Compensatory Funds Per Each Unit of Effectiveness	\$ 6.96	\$ 4.64	\$ 21.09	\$ 7.50

## IX. CONCLUSIONS

Based on the results of pupil performance and the instructional program during FY72, the following conclusions may be stated:

- A. Out of 38 kindergarten pupils only 13 scored greater than or equal to 1.6 on the Metropolitan Achievement Tests (MAT) administered in the spring. Twelve of those 13 scored either "C" (four) or "B" (eight) on the Metropolitan Readiness Test (MRT), given in the fall.
- B. The team-teaching, Cluster I, pupils did slightly better than the self-contained, Cluster II, pupils in grade two, but were significantly lower in reading and math in the third grade.
- C. There was no significant correlation found in grades two, three and five between pupil attendance and achievement. Only those pupils who were enrolled the entire year were included in the analysis, and in fact there seemed to be a negative relationship in the fifth grade between time in attendance and performance.
- D. When the gain rate of reading effectiveness is observed longitudinally over FY 1970-71 and FY 1971-72, only this year's (71-72) third grade improved. In no case did the index of acceptability increase. Only the third grade gained greater than or equal to .6.
- E. The second and third grades were rated as having effective reading programs this year. Across grades two, three, four, and five the pupils were performing at approximately two-thirds of the national norms.
- F. The mathematics program was effective in the second, third and fifth grades, and the pupils' scores increased significantly, although not at a one month per month of instruction rate.
- G. Pupils in each grade had an acceptable level of self-esteem associated with peer relations, scholastic endeavors, family relations and general view of themselves.

- H. The two-year-old preschool children showed significantly greater six-month scores on the cognitive and motor skills scales of the Southern Regional Education Board (SREB) checklist; the three-year-olds had significantly greater six-month scores on the cognitive, social-emotional, and motor skills scales; the four-year-olds on the cognitive, social-emotional, motor skills, and hygiene scales. At all age levels, the greatest gains were made in the cognitive areas.
- I. The over-all organizational climate became more open during FY72 than it was in FY71. No general statement can be made about the relationship between the degree of openness of climate and the achievement.
- J. The amount of funds spent was not related to the achievement of pupils.

## X. RECOMMENDATIONS

Based upon the findings and conclusions drawn, it is recommended that:

- A. Considerable care be taken in continued development of the team-teaching, Teacher Corps cluster.
- B. The fourth and fifth grade pupils, especially, be tutored in techniques of taking standardized, timed tests.
- C. Specific plans be made to increase performance of fourth and fifth grade pupils.
- D. Special attention be given to integration of compensatory fund programs into regular classroom activities.
- E. In addition to standardized test scores, other methods of reporting pupil development be explored. An example of such a method would be to include Comprehensive Instructional Program (CIP) diagnostic test results in reports and school evaluation.

F. Bethune has had an extensive series of compensatory programs for several years. Consequently, it would be desirable for the faculty to conduct a carefully planned longitudinal study in order to determine how the sequence and scope of educational opportunities and use of funds can be utilized more effectively.

The faculty and staff are to be commended on their willingness to look at themselves, adapt to new needs, and try new developments in education. A great deal of this school report is directly or indirectly attributable to their efforts and ideas. With Bethune's many compensatory programs, the critical variable in pupil "success" will be program delivery.

## **APPENDIX**

RATING FORM FOR TWO YEAR OLDS  
(Rate at 4-Month Intervals - Use Pen)

Name of Child \_\_\_\_\_ Date of Birth \_\_\_\_\_

Date of Enrollment in Day Care \_\_\_\_\_ Date of Rating \_\_\_\_\_  
Mo. Day Yr.

Rater's Name \_\_\_\_\_ Position \_\_\_\_\_

Cognitive (Including Verbal and Communication) YES NO

1. Uses words to express wants \_\_\_\_\_ — —
2. Talks--names some 10-15 known objects and a few familiar people or pets, has a small noun-verb vocabulary \_\_\_\_\_ — —
3. Uses pronouns "me" and "my," shows possessive spirit \_\_\_\_\_ — —
4. Names 3 pictures in picture book \_\_\_\_\_ — —
5. Points to parts of a doll or body (hair, mouth, eyes, etc.) \_\_\_\_\_ — —
6. Makes 2-3 word sentences \_\_\_\_\_ — —
7. Complies with simple commands--such as retrieving, or "no-no." Fetches, carries, or goes \_\_\_\_\_ — —
8. Listens to short nursery rhymes \_\_\_\_\_ — —
9. Matches, compares familiar objects as to color, or form,  
or size in play, or groups similar objects<sup>a</sup> \_\_\_\_\_ — —
10. Counts 2, aware of "one more," knows "how many" to 2 \_\_\_\_\_ — —

Social and Emotional

11. Shows affection--carries or hugs doll, shows regard for people or possessions, fondles and indicates personal relatedness \_\_\_\_\_ — —
12. Occupies self, initiates own play activities or on simple suggestion \_\_\_\_\_ — —
13. Explores, investigates surroundings, adventures in new or modified ways \_\_\_\_\_ — —

<sup>a</sup>Original item read: "as to color, form or size in play, groups similar objects."

<u>Motor Skills</u>	YES	NO
14. Walks backward <sup>a</sup>	—	—
15. Walks up steps with help--not on all fours <sup>b</sup>	—	—
16. Climbs -- furniture and obstacles <sup>c</sup>	—	—
17. Kicks ball forward	—	—
18. Throws ball overhand (not directed in aim)	—	—
19. Runs	—	—
20. Stacks blocks 3 high <sup>d</sup>	—	—
21. Unwraps, removes covers from candy or other objects or peels bananas (no special skills required)	—	—
22. Disassembles - takes simple objects apart with minimal difficulty, unfastens clothing	—	—
<u>Hygiene and Self-Help</u>		
23. Drinks from cup or glass unassisted but spills occasionally	—	—
24. Removes simple garment	—	—
25. Uses spoon, spills a lot	—	—
26. Begins toilet training, asks for toilet	—	—
27. Shows pride in toilet achievement and concern about failures	—	—

<sup>a</sup>Original item read, "Walks backward--walks up steps with help--not all fours"

<sup>b</sup>New item (see above)

<sup>c</sup>Original item read, "Climbs--furniture, stairs, or obstacles."

<sup>d</sup>Original item read, "Builds tower of 3 cubes"

RATING FORM FOR THREE YEAR OLDS  
(From Age 3 to Age 4 - Rate at 6-Month Intervals - Use Pen)

Name of Child \_\_\_\_\_ Date of Birth \_\_\_\_\_

Date of Enrollment in Day Care \_\_\_\_\_ Date of Rating \_\_\_\_\_  
Mo. Day Yr.

Rater's Name \_\_\_\_\_ Position \_\_\_\_\_

Cognitive

YES NO

1. Compares size Extends "matching" concept to size, as big or little. Comparisons may be easy, but should be verbalized and of practical use, as in block building. — —
2. Counts 3 Extends concept of counting to three. Understands process of counting beyond two. May rote count beyond this. — —
3. Dramatizes Acts out, singly, or with others, simple stories, Mother Goose rhymes and characters and scenes. Acts out role playing. — —
4. Uses Plurals — —
5. Converses In short sentences, answers questions, gives information, repeats, uses language to convey simple ideas. — —
6. Sings Sings short snatches of songs. — —
7. Knows name Gives first and last name. — —
8. Names pictures and tells action Names pictures, and on request tells the action, e.g., "Baby is sleeping," or can identify the usage of things in pictures, "Show me the one you wear." — —

Social and Emotional

9. Plays beside Plays singly with sustained interest alongside or among other children or with adults, pets, or belongings with little disturbance or disturbing. — —
10. Plays with Interacts with another child or children. Interpersonal play with other children, pets or adults. — —

<sup>a</sup>Original item read, "...to three. Manipulates number concepts meaningfully more than two."

Social and Emotional (Continued)

YES NO

11. Helps Helps at little household tasks or errands. — —

12. Knows and relates to own sex Can respond correctly to "Are you a little boy or a little girl?" Relates and acts accordingly. — —

Motor Skills

13. Assembles Takes simple objects available, puts simple parts together not requiring much mechanical skill. — —

14. Builds Uses simple building blocks, color blocks,<sup>a</sup> construction toys. Shows imagination. — —

15. Copies circle Draws a circle, usually from copy. — —

16. Builds tower Stacks blocks <sup>b</sup> eight high in imitation of one you do. — —

17. Jumps in place — —

18. Walks down stairs One step per tread. — —

19. Balances On one foot for one second. — —

20. Throws ball purposely overhand Distance, direction and accuracy not essential, but should be more than grossly random. — —

<sup>a</sup>Original item included phrase, "Puts things together."<sup>b</sup>Original item read, "Builds a tower of eight cubes in imitation of one you do."

Hygiene and Self-Help

YES NO

- |                       |  |     |
|-----------------------|--|-----|
| 21. Is toilet trained | Exercises bladder and bowel control.   | — — |
| 22. Uses toilet alone | Cares for self at toilet (goes to toilet alone without help, knows papering.)<br>Pulls up and pulls down own clothes but may require help. | — — |
| 23. Dresses           | Puts on coat or dress with help on hard parts, but need not button.  | — — |
| 24. Puts on shoes     | Puts on shoes, not tied.   | — — |
| 25. Feeds alone       | Feeds self well alone.   | — — |
| 26. Washes hands      | Washes hands unaided acceptably and dries same.  | — — |

<sup>c</sup>Original item read, "...Knows papering. Unfastens & fastens own clothes but may require help.

RATING FORM FOR FOUR AND FIVE YEAR OLDS  
(FROM Age 4 to Age 6 - Rate at 8-Month Intervals - Use Pen)

Name of Child \_\_\_\_\_ Date of Birth \_\_\_\_\_

Date of Enrollment in Day Care \_\_\_\_\_ Date of Rating \_\_\_\_\_  
Mo. Day Yr.

Rater's Name \_\_\_\_\_ Position \_\_\_\_\_

Cognitive YES NO

1. Knows parts of body Can identify by pointing to or matching all major visible parts of the body.
2. Counts to 4 Counts four objects and knows what he is doing--does not do it by rote memory.
3. Draws square Can draw a square design (angle corners and about equal sides) with crayon, pencil, or pen on paper or suitable surface. Design may be drawn with or without copy or as part of other drawing.
4. Uses connected sentences Tells experiences or simple events in sequence (beginning, middle, end). Uses sentence combinations.
5. Draws 1 Draws human figures with head, body, arms and legs.
6. Names coins Names correctly three of four--penny, nickel, dime, or quarter and does not confuse them. He need not know their numerical value nor their relative <sup>a</sup>worth.
7. Recites Reproduces short verses, rhymes, little songs from memory--or makes them up.

<sup>a</sup>Original item read, "Recognizes by name or tells name of penny, nickel, dime and does not confuse them with other coins, such as quarter. He need ..."'

Cognitive (Continued)

YES NO

8. Speaks clearly      Speaks clearly enough so that a stranger can understand him.      \_\_\_\_\_
9. Knows age      Tells age to last or nearest birthday in whole years. May know age to years and months or to next age. Must be more than rote memory--that is his age should have meaning to him as being <sup>b</sup>larger or smaller than some other number.      \_\_\_\_\_
10. Names colors      Tells and selects names of primary colors (red, green, yellow, blue) when pointing out an object. Simple selecting, matching or identifying are done at earlier age.      \_\_\_\_\_
11. Draws triangle      Same as drawing square except for difference in design.      \_\_\_\_\_
12. Knows address      Can give address (street and number) correctly.      \_\_\_\_\_
13. Knows simple relative concepts      (Avoid abstract examples.)      Understands concept of weight (heavy and light).      \_\_\_\_\_
14.      Understands concept of temperature (hot and cold). For example, which is hot, stove or refrigerator?      \_\_\_\_\_
15.      Understands concept of size (large and small). Use objects obviously different in size.      \_\_\_\_\_
16.      Understands concept of distance (far and near). Use objects child can move.      \_\_\_\_\_
17. Uses prepositions correctly      Knows the meaning of prepositions such as up and down, in and out, over and under.      \_\_\_\_\_
18. Prints      Prints first name when requested or for self-satisfaction.      \_\_\_\_\_

<sup>b</sup>Original item read, "...next age. Should be more than rote memory..."

Cognitive (Continued)

YES NO

19. Knows seasons      Knows seasons of the year and how they relate to events (school starts in the fall; Christmas comes in winter).      — —
20. Draws 2      Draws human figures with head, body, arms and legs, indications of hands and feet, and symbols for eyes and mouth.      — —

Social and Emotional

21. Tells name  
Self Esteem      Identifies self by given first and last name, gives both names when asked.      — —
22. Can separate      Able to separate from mother without crying.      — —
23. Relates positively  
to adults      Relates positively--asks for help, asks approval, but is not overly dependent      — —
24. Relates positively  
to children      Seeks a child to play with, or responds<sup>a</sup> to overtures from another child.      — —
25. Plays  
cooperatively      Plays in groups (two, three, or more children), observes rules in a game or in competition.      — —
26. Shares      Shares toys and materials with other children.      — —
27. Takes turns      Asks for a turn, awaits his turn without too much impatience.      — —
28. Identifies others      Knows the name of and calls by name two adults on staff or other children.      — —

<sup>a</sup>Original item read, "Seeks a child to play with."

<sup>b</sup>Original item read, "Knows the name of and calls by name two adults on staff."

Social and Emotional (Continued)

YES NO

29. Helps      Helps or offers to do something,  
such as to help set places at lunch or  
<sup>c</sup> help clean up.      — —
30. Participates      Joins in song or group games with others--  
children's songs, action songs, memorizes  
words and melodies <sup>d</sup> shares in events when  
singing is desired.      — —
31. Persistence      Persists on problem solving games such as  
matching games, puzzles, and/or can sit at  
a chosen task until completed or at least  
15 minutes.      — —
32. Pride      Shows pride in accomplishment or products  
he creates such as painting, block building,  
sand castle.      — —
33. Protects self      Stands up for own rights, does not permit  
other children to constantly take advantage  
of him.      — —
34. Amuses self      Makes purposeful use of equipment or  
activity during free play time.      — —
35. Pays attention      Can sit through a complete story selected  
for the age group. Listens to a story  
that the teacher is reading and looks at  
pictures to follow the story.      — —

<sup>c</sup>Original item read, "Volunteers help and offers to do something ..."

<sup>d</sup>Original item read, "Sings--Joins in song with others--children's songs,  
action songs. Memorizes words and melodies, moderately in tune, shares in  
events when singing is desired.

**Motor Skills****YES    NO**

36. Climbs                    Is able to climb equipment provided for that purpose.                    \_\_\_\_\_    \_\_\_\_\_
37. Catches                    Catches 12-inch or beach ball when it is thrown to him.                    \_\_\_\_\_    \_\_\_\_\_
38. Hops                      On one foot alone--four steps.                    \_\_\_\_\_    \_\_\_\_\_
39. Skips                     Hops on one foot, then the other in continuous movement from place to place.                    \_\_\_\_\_    \_\_\_\_\_
40. Strings or threads      Can thread beads or spools on string.                    \_\_\_\_\_    \_\_\_\_\_
41. Use of scissors          Understands use of scissors and can cut a piece of paper.                    \_\_\_\_\_    \_\_\_\_\_
42. Hammers                  Can hammer nails into a board until they are secure.                    \_\_\_\_\_    \_\_\_\_\_

**Hygiene and Self-Help**

43. Dresses self            Unfastens and removes and/or replaces and fastens most of his own clothes without help or undue delay. Need not tie laces or put on rubbers on this item. Fastens large buttons.                    \_\_\_\_\_    \_\_\_\_\_
44. Use of spoon            Can use spoon effectively.                    \_\_\_\_\_    \_\_\_\_\_
45. Use of fork             Can use fork effectively.                    \_\_\_\_\_    \_\_\_\_\_
46. Toilets self            Cares for ordinary toilet need without undue assistance. Manages clothing, cleansing (papering) and bathroom facilities acceptable according to conventional routine.                    \_\_\_\_\_    \_\_\_\_\_
47. Washes face and hands   Wipes water on face, and uses soap on hands and rinses hands. Need not do a perfect job.                    \_\_\_\_\_    \_\_\_\_\_
48. Brushes teeth after lunch   Handles toothbrush effectively when given instruction.                    \_\_\_\_\_    \_\_\_\_\_

Hygiene and Self-Help (Continued)

YES NO

49. Samples food Will try new foods when served.

— —

50. Fastens shoes Ties a bow on shoes.

— —

### MURRAY'S NEED-PRESS SCALES

1. Abasement-assurance: self-deprecation versus self-confidence
2. Achievement: striving for success through personal effort
3. Adaptability-defensiveness: acceptance of criticism versus resistance to suggestion
4. Affiliation-rejection: friendliness versus unfriendliness
5. Aggression-blame avoidance: hostility versus disorganization
  
6. Change-sameness: flexibility versus routine
7. Conjunctivity-disjunctivity: planfulness versus organization
8. Counteraction-inferiority avoidance: restraining after failure versus withdrawal
9. Deference-restiveness: respect for authority versus rebelliousness
10. Dominance-tolerance: ascendancy versus forbearance
  
11. Ego Achievement: striving for power through social action
12. Emotionality-placidity: expressiveness versus restraint
13. Energy-passivity: effort versus inertia
14. Exhibitionism-inferiority avoidance: attention-seeking versus shyness
15. Fantasied achievement: daydreams of extraordinary public recognition
  
16. Harm avoidance-risk-taking: fearfulness versus thrill seeking
17. Humanities-social sciences: interests in the humanities and the social sciences
18. Impulsiveness-deliberation: impetuosity versus reflection
19. Narcissism: vanity
20. Nuturance-rejection: helping others versus indifference
  
21. Objectivity-projectivity: detachment versus superstition (AI) or suspicion (EI)
22. Order-disorder: compulsive organization of details versus carelessness
23. Play-work: pleasure-seeking versus purposefulness
24. Practicalness-impracticalness: interest in practical activities versus indifference
25. Reflectiveness: introspective contemplation
  
26. Science: interest in the natural sciences
27. Sensuality-puritanism: interest in sensory and aesthetic experiences
28. Sexuality-prudishness: heterosexual interests versus inhibitions of heterosexual interests
29. Supplication-autonomy: dependency versus self-reliance
30. Understanding: intellectuality

## ORGANIZATIONAL CLIMATE INDEX FACTORS

### A. Development Press

1. Intellectual climate — This factor describes a concern with intellectual activity, social action, and personal effectiveness. It is based on the scales for humanities, social science, science, reflectiveness, understanding, fantasied achievement, exhibitionism, and change. A school that scores high on this factor is one in which there is a high degree of intellectuality, heterosexual interests, flexibility, and attention seeking.
2. Achievement standards — This is the factor reflecting press for achievement. Schools high on this factor stress hard work, perseverance, and a total day-by-day commitment to institutional purposes. It is defined by counteraction, energy, achievement, emotionality, and ego achievement.
3. Practicalness — This factor suggests an environmental dimension of practicality tempered with friendliness. It is defined by practicalness and nurturance. A school that scores high on this factor is one in which the teachers feel there is a high interest in practical activity and a desire for helping others.
4. Supportiveness — This factor deals with aspects of the organizational environment that respect the integrity of the teacher as a person, but the implication is that dependency needs must be supported rather than personal autonomy emphasized. It might be considered a measure of democratic paternalism. The scales defining it are assurance, tolerance, objectivity, affiliation, conjunctivity, supplication, blame avoidance, harm avoidance, and nurturance. A school that scores high on this factor is one in which the teachers feel a high degree of self-confidence, friendliness, and planfulness.
5. Orderliness — The components of this factor are concerned with the press for organizational structure, procedure, orderliness, and a respect for authority. Conformity to community pressures and an effort to maintain a proper institutional image probably are also concomitants of a high score on this factor. It is based on order, narcissism, adaptability, conjunctivity, deference, and harm avoidance.

A school that scores high on this factor is one in which the teachers feel there is a compulsive organization of details, acceptance of criticism, respect for authority, vanity, and planfulness.

B. Control Press

In addition to the reflection of factors (1) and (2) under Development Press, Control Press involves:

Impulse control — This factor implies a high level of constraint and organizational restrictiveness. There is little opportunity for personal expression or for any form of impulsive behavior. It is based on work instead of play; prudishness versus sexuality; aggression versus blame avoidance; impulsiveness versus deliberation; emotionality versus placidity; and exhibitionism versus inferiority avoidance. A school that scores high on this factor is one in which the teachers feel there is a high degree of purposefulness, heterosexual interests, hostility, impetuosity, expressiveness, and restraining after failure.

R E S E A R C H   A N D   D E V E L O P M E N T   R E P O R T

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1971-72

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## RATIONALE

Thomasville Heights Elementary School was opened initially for the 1971-72 school year to adjust the overcrowded situations at J. W. Dobbs and Guice Elementary Schools. Thomasville serves a pupil population of grades kindergarten through seventh. The pupils attending reside in the surrounding communities.

According to the ESEA--Title I Survey, 49 per cent of the enrollment is from families whose annual incomes are \$3,000 or less. This fact qualifies Thomasville to receive special funds for providing compensatory services to improve the educational opportunities of the pupils attending.

As is true in schools receiving special funds, each year a study is made to assess the effectiveness of the school program in utilizing those funds. The purpose of this report is to present the findings of FY '72 which in this case will serve as baseline data for longitudinal purposes.

## Supporting Projects

Four projects (Comprehensive Instructional Program; ESEA, Title I; Career Opportunities Program; and Instructional Assistance Program) were utilized as resources in support of the instructional program. Each of these projects contributed services designed to meet certain needs of the pupil population. A brief description of the services provided by each project is given under the specific project.

### Comprehensive Instructional Program

The Comprehensive Instructional Program (CIP) was a locally conceived and funded project. Its purposes were to insure growth in reading and math for each pupil through diagnostic teaching and in-service training; and to establish a minimum professional floor for teachers. To this end pupils in grades one through three were scheduled to be diagnostically tested in reading four times

during the year, so that appropriate reading activities could be prescribed for them, also inservice training in reading was provided for teachers utilizing the Georgia Education Model Evaluation Instruments.

A CIP resource teacher from Area II was assigned to provide assistance with reading instruction upon the request of the faculty. The CIP resource teacher was available to provide assistance in the following areas:

- A. Diagnosing (informal reading inventory, teacher--made test, standardized test, etc.).
- B. Grouping.
- C. Effective use and selection of materials.
- D. Effective use of audovisual equipment.
- E. Teacher-made games and activities.
- F. Establishing interest centers.
- G. Use of CIP test results.
- H. Use of Metropolitan Readiness Tests (MRT) and/or Metropolitan Achievement Tests (MAT) results.
- I. Planning a lesson.
- J. Word recognition skills.
- K. Comprehension skills.
- L. Using developmental reading tests and accompanying basal readers.
- M. Guiding children's free reading.
- N. Utilizing a teacher-parent team in the reading program.
- O. Providing reading activities for accelerated readers.

## ESEA Title I

The overall goal of Title I was to provide activities designed to promote progress in improving basic reading skills of educationally deprived children. Toward this goal the services of one lead teacher and eight educational aides were provided.

The lead teacher served in a full-time position and worked with the total instructional program in the school as it related to educationally deprived children. The lead teacher assisted teachers, individually and in small groups, by helping them to identify educationally deprived children; then securing materials; suggesting new approaches, materials, and techniques; reviewing teaching plans and making suggestions; and providing inservice training geared toward teaching slow learners.

The educational aides assisted teachers with preparing instructional materials, supervised pupils working on special activities, and worked with pupils in reading activities individually and in small groups.

## Instructional Assistance Program

The Instructional Assistance Program (IAP) was a state funded project. Its purposes, as implemented at Thomasville Heights, were to: (1) upgrade the quality of instruction by providing personnel to instruct successive groups of pupils in the areas of art, music, and physical education while simultaneously releasing successive groups of other instructional personnel for team planning; and (2) give pupils needing remedial work the chance to succeed and to provide many opportunities for success with language experiences in the Communication Skills Laboratory (CSL).

The IAP team, consisting of a Communication Skills teacher, an art teacher, a physical education teacher, a vocal music teacher and two educational aides, worked under the leadership of the Title I lead teacher to provide enrichment education for successive groups of pupils on various instructional levels while freeing regular teachers for group planning. This team was in addition to the staff which was otherwise assigned to the school.

## Career Opportunities Program

The Career Opportunities Program (COP) was a training program designed to provide educational opportunities for capable persons from low-income communities, who perhaps otherwise would not have pursued careers of education. The concept of COP was that these persons, if provided an opportunity, could improve educational opportunities of children from low income communities, while training for careers of useful services. Three of the Title I educational aides and the two IAP educational aides were COP trainees. As COP trainees, the aides were enrolled in regular classes leading toward professional certification. COP'S contribution to the school's instructional program was in the form of providing professional training for paraprofessionals to aid them in performing more effectively the tasks assigned to them as participating members of a team.

### NEEDS OF THE PUPILS

Data concerning pupil progress were analyzed in all grades, however the second grade pupils were identified as the beginning grade for longitudinal study. Consequently, the needs were related specifically to the second grade pupils. However, they were considered as being characteristic of general, personal and instructional needs of the total population. These pupils needed:

- A. To improve self-concept.
- B. To acquire a desire to read (motivation).
- C. To develop and improve basic reading skills:
  - 1. Sight vocabulary.
  - 2. Word recognition.
  - 3. Comprehension.

### GOALS OF THE PROGRAM

The following goals were set forth on the basis of the previously stated needs.

- A. To provide experiences through which the pupils can realize success and be sufficiently challenged.
- B. To provide opportunities wherein pupils can receive immediate reward for, or assistance in completing a task.
- C. To provide experiences wherein the pupils can develop into independent, self-motivating individuals, who can find and apply knowledge.
- D. To provide experiences through which the pupils can develop basic skills and individual abilities.
- E. To provide professional and paraprofessional personnel to implement the instructional program needed by the pupils.
- F. To provide new organizational and administrative structures which will increase teacher effectiveness and pupil achievement.

#### BEHAVIORAL OBJECTIVES

The following objectives served to guide the activities of the program in meeting the needs of the pupils. Further, they served as the basis for evaluating the pupil's performance and in determining the extent to which the goals were accomplished and to which the needs were satisfied.

- A. Pupils involved in the longitudinal study will show annual improvement in self-concept statistically significant at the .05 level.
- B. Eighty per cent of the pupils will show a gain in reading of one month for each month in the program.
- C. The same per cent of first graders who scored "C" or above on the Metropolitan Readiness Tests will score 1.6 or above on the Metropolitan Achievement Tests.
- D. Pupils taught by COP teams will show significantly greater annual gains in reading than will similar pupils not taught by COP teams.

- E. Pupils taught by COP teams will show a more significant gain in self-concept than will similar pupils taught in self-contained classrooms.
- F. As a COP school, Thomasville will have a more open organizational climate than will schools that do not have COP teams.

#### Variables to be Measured

- A. Pupils' self-concept.
- B. Academic achievement in reading.
- C. Openness of organizational climate.

### MANAGEMENT AND CONTROL

The Superintendent of the Atlanta Public Schools is appointed by the Atlanta Board of Education and is authorized by the Board to administratively direct the instructional program of the school system. There are five area superintendents who, under the guidance of the Superintendent, are administratively responsible for all school programs. The area superintendent of each geographical area supervised the principals of the schools within that area. Also, within the organizational structure of the local school system, there were six assistant superintendents who directed the six divisions of supportive services to the instructional program. Among these divisions were: (1) Research and Development, (2) Instruction, (3) Personnel, and (4) Administrative Services. The functions of these divisions have direct impact on the instructional opportunities for pupils.

The Assistant Superintendent for Research and Development and his staff were responsible for developing new programs, evaluating the effectiveness of program activities, and disseminating information.

The Assistant Superintendent of Staff Personnel Services and his staff assumed the responsibility of meeting the staffing needs of the instructional programs within the schools and project activities.

Inservice training for teachers, staff development, and curriculum development were directed by the Assistant Superintendent for Instruction and his staff. Within this division, the directors and coordinators of federal, state, and local projects and various curriculum areas worked with the staffs of the other divisions, the area superintendents, the principals, and the teachers to implement programs and provide for the training needs of the school personnel.

The area superintendent and staff were administratively responsible for the schools in the geographic areas. The area staff supervised and worked directly with the local school staff in implementing the instructional program of the schools.

At the local school the principal coordinated the total program of the school. Assignment of teachers to classes, supporting individual and group activities, arranging professional meetings, and attending to all administrative aspects of the program were among the functions of the principal.

The Title I lead teacher was concerned specifically with the instructional aspects of the program, particularly for those pupils who were identified as being most educationally deprived.

The organizational pattern was based on team-teaching concept. The teachers on each team were responsible for organizing, planning, and scheduling activities in each cluster. One teacher on each grade level served as the team leader. The team leader coordinated the activities on that particular grade level and served as a liaison person between the grade level and the administration.

## PROCESS

The following activities were directed toward fulfilling the goals of the program, thus meeting the needs of the pupils.

- A. Inventory-Survey tests, interests inventory.
- B. Effective use of audiovisual equipment and supplementary materials.
- C. Use of the library facilities and services of the librarian.

D. Field trips.

E. Dramatics.

F. Communication Skills Laboratory.

G. Uninterrupted sustained silent reading (USSR).

USSR is an approach wherein silent reading is considered more significant than oral reading and contextual reading is of greater importance than are skills recognition at the word/letter level. Basic to the concept of the USSR is that the greatest reading skill to be achieved is that of sustaining silent reading over long sketches of print without interruption or without breaks. The reader's purpose during the silent reading time is to get as many of the important and significant ideas as he can through silent reading. The teacher builds the climate for USSR by discussing individually in small groups and with the total class questions which help the reader develop the understanding that reading means getting as many big ideas out of print through sustained silent readings as he possibly can.<sup>1</sup>

Because the second grade was selected for indepth and longitudinal study, the process described was specifically used in the second grade; however, the organizational pattern was similar in all grades throughout the school.

Approximately 125 pupils were assigned to the second grade cluster. Four teachers and one educational aide composed the instructional team. The pupils were grouped homogeneously for instruction within the cluster. Reading was scheduled for approximately two and one-fourth hours daily. During that large block of time two types of activities, large groups and small groups, were conducted. Three teachers, each of whom took one small group, were responsible for reading instruction using the basal reader and accompanying study book activities. Those groups were composed of pupils on similar reading levels. At the same time as the small group instruction, one teacher, one educational aide, and pupil helpers conducted the large group instruction.

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<sup>1</sup> Lymon C. Hunt, "USSR: A Comment about the Most Basic Reading Skills," Boulder School of Education, University of Colorado.

The large group of pupils was involved in activities such as: listening to recordings of letter sounds and completing the accompanying work sheets (Scott-Foresman's Talking Alphabet); listening to stories on tapes and records; and playing games that teach basic sight words and aid in associating the sounds of initial consonants, blends, diagraphs, and vowels with printed symbols.

The pupil helpers that assisted with the large group activities were sixth and seventh grade pupils. Two pupils helped one day a week by reading stories to, playing games with, or tutoring a group of children or one pupil within the large group.

## EVALUATION

### Research Design

The general design used to study the program was one which determined the beginning and ending levels of pupils and denoted changes which occurred. The following procedures were used to obtain data necessary for evaluative purposes.

- A. Data collected by administering the Self-Appraisal Inventory (SAI) and the School Sentiment Index (SSI) to a sample of pupils in the second grade were used as a baseline data on self-concept.
- B. Data collected by the Metropolitan Achievement Tests (MAT) through the City-wide Testing Programs were analyzed to assess academic gains in reading. The reading gains of pupils who participated in the Youth-Tutoring-Youth (YTY) activity were compared to the reading gains of other pupils in that grade.
- C. Data collected by administering the Organizational Climate Index (OCI) were used as baseline data on openness of the Organizational climate.

### Findings

#### Academic Achievement in Reading

The data showing the performance of ninety first grade pupils on the MRT and the reading subtest of the MAT are presented in

Table 1 Forty-eight pupils scored "C" or above and forty-two pupils scored "D" or below on the MRT. Of the forty-eight pupils who scores "C" or above on the MRT, indicating readiness for the first grade work, only sixty-two per cent scored 1.6 on the MAT. About one third of the pupils who scored "D" or below on the MRT also scored 1.6 or above on the MAT. In that the MRT is used to access readiness for first grade work and only about two thirds of those pupils whose scores indicated readiness for first grade scored as was expected (1.6 or above) on the MAT, a distribution of pretest and posttest scores was made to determine the point of greatest discrepancies.

TABLE 1

SUMMARY OF PUPIL PERFORMANCE ON THE  
METROPOLITAN READINESS TESTS AND THE  
METROPOLITAN ACHIEVEMENT TESTS READING SUBTEST  
 First First Grade N = 90

MRT Scores Group	Number (S <sub>3</sub> Population)	1.6 or Above		1.0 - 1.5	
		No.	Per Cent	No.	Per Cent
"C" or above	48	30	62	18	38
"D" or below	42	14	33	28	67

The distribution of scores on both pretest and post is presented in Table 2. These data seemingly indicated that special efforts were made to provide individualized work suited to the "high risk" group; yet, there was some deficiency in meeting the specific needs of the "average" and "above average" groups in that one third of the pupils in these groups did not perform in the manner expected.

The data concerning the pretest/posttest reading scores for the second, third, fifth, sixth, and seventh grades are presented in Table 3. The fourth grade took the MAT as a posttest only and therefore was excluded from this table. These data show the number of pupils who took both pretest and posttest (S<sub>3</sub> population), the mean reading pretest and posttest scores, the mean reading gain, the per cent of expected gain achieved, the gain score  $t$  test, the per cent of attendance, and the coefficients of correlation between reading gains and attendance.

TABLE 2

DISTRIBUTION OF LETTER RATING AND READINESS STATUS CORRESPONDING TO VARIOUS  
 RANGES OF TOTAL SCORE ON THE METROPOLITAN READINESS TESTS AND THE  
METROPOLITAN ACHIEVEMENT TESTS READING SCORES -- FIRST GRADE

1971-72 -- N = 90

No.	Score <u>Range</u>	Letter <u>Rating</u>	Readiness <u>Status</u>	Significance	Posttest	
					1.6 or Above	Below 1.6
4	Above 76	A	Superior	Apparently very well prepared for first grade work. Should be given opportunity for enriched work in line with abilities.	3	1
18	64 -- 76	B	High Normal	Good prospects for success in first grade work provided other indications, such as health, emotional factors, etc., are consistent.	12	6
26	45 -- 63	C	Average	Likely to succeed in first grade work. Careful study should be made of specific strengths and weaknesses of pupils in this group and their instruction planned accordingly.	15	11
38	24 -- 44	D	Low Normal	Likely to have difficulty in first grade work. Should be assigned to slow section and given more individualized help.	14	24
4	Below 24	E	Low	Chances of difficulty high under ordinary instructional conditions. Further readiness work, assignment to slow sections, or individualized work is essential.	0	4

TABLE 3

COMPARISON OF METROPOLITAN ACHIEVEMENT TESTS MEAN READING  
 PRETEST AND POSTTEST SCORES, MEAN READING GAIN, PER CENT OF EXPECTED  
 GAIN, AND PER CENT OF ATTENDANCE FOR GRADES 2, 3, 5, 6, AND 7

<u>Grade</u>	<u>No.</u>	<u>Mean Score</u>		<u>Per Cent of Expected Gain</u>	<u>t-test</u>	<u>Per Cent of Attendance</u>	<u>r</u>
		<u>Pre</u>	<u>Post</u>				
2	93	1.5	1.9	0.4	68.3	10.63**	.163
3	80	2.1	2.4	0.3	46.8	4.10**	-.004
5	112	3.8	4.0	0.2	38.9	2.63**	.001
6	96	4.2	4.3	0.1	9.4	0.72	.031
7	87	4.6	4.5	-0.1	-9.5	-0.50	.062

\*\* Significant at the .01 level.

According to these data none of the grades realized six months gain in reading between pretest and posttest. However, the gains in grades two, three, and five were statistically significant at the .01 level. Further there was no significant correlation between the reading gains and attendance in the S<sub>3</sub> population for any grade. It can be assumed, then, that attendance did not influence the reading performance of the S<sub>3</sub> population of any grade.

Modifying the acceptable performance level of a one-month gain in reading for each month of instruction, the faculty set forth as an objective that 80 per cent of the pupils would gain at least six months (one month gain for each month of instruction between pretest/posttest) in reading. The distribution showing the per cent of pupils who obtained this objective and those who did not obtain this objective is shown in Table 4. Neither one of the grades obtained or came close to obtaining the objective. As a total school only 27 per cent of the 376 pupils who took both the pretest and posttest showed a gain of at least six months.

These data point to a very definite need for special attention to be given to the instructional program. It should be taken into account, however, that this was the beginning year for this school. The school plant is an open classroom facility and the faculty's orientation to working in open clusters was limited. It is very likely that some of the weaknesses evidenced in the instructional program can be overcome in successive years as both pupils and faculty become more cognizant of the open cluster concept and can make proper adjustment.

Approximately ten pupils from the fifth grade participated in the Y-T-Y activities. These pupils were identified according to MAT data and teacher observation as having limited basic skills and needing additional help beyond the regular classroom experience.

Although ten pupils participated in Y-T-Y activities, matched scores were available for eight. Using analysis of covariance comparison was made between the performance of the tutored and non-tutored pupils on the MAT subtests related to reading performance (word knowledge and reading). The pretest scores were used as the covariant. The analysis of covariance was used to remove any bias introduced by differences in initial reading levels and to permit an unbiased comparison of reading gain. According to the F-test, there was no statistically significant difference between the two groups on either subtest. Since the beginning difference

between the two groups was adjusted in the comparison, the two groups made similar gains. These data, presented in Table 5, indicated that tutoring did not influence the performance in reading of the tutees.

TABLE 4

SUMMARY OF PUPIL GAINS BY GRADE ON THE READING  
SUBTEST OF THE METROPOLITAN ACHIEVEMENT TESTS

<u>Grade</u>	<u>Gain</u>	<u>Number</u>	<u>Per Cent</u>
2	0.6 or more	26	28
	less than 0.6	67	72
3	0.6 or more	19	24
	less than 0.6	61	76
5	0.6 or more	39	35
	less than 0.6	73	65
6	0.6 or more	20	21
	less than 0.6	77	79
7	0.6 or more	25	29
	less than 0.6	62	71
TOTAL	0.6 or more	103	27
	less than 0.6	273	73

TABLE 5

**COMPARISON OF MEAN READING SUBTEST  
SCORES (PRE AND POST) ON THE METROPOLITAN  
ACHIEVEMENT TESTS FOR TUTORED AND NON-TUTORED PUPILS**

	<u>Treatment</u>	<u>Error</u>	<u>Total</u>
Word Knowledge			
Sum of Squares: X (Pretest)	0.91	71.70	72.61
Sum of Squares: Y (Gain)	0.03	45.17	45.20
Sum of Products	0.16	- 4.24	- 4.08
Degrees of Freedom	1.00	110.00	111.00
Adjusted Sum of Squares: Y	0.05	44.92	44.97
Degrees of Freedom For			
Adjusted Sum of Squares	1.00	109.00	110.00
Variance Estimates	0.05	0.41	
$F=0.12327$			
Adjusted Mean of $Y_1$ :	0.043258	Tutored	
Adjusted Mean of $Y_2$ :	0.12648	Non-tutored	
Reading			
Sum of Squares: X (Pretest)	1.64	68.62	70.26
Sum of Squares: Y (Gain)	0.10	92.80	92.90
Sum of Products	0.41	- 25.22	- 24.81
Degrees of Freedom	1.00	109.00	110.00
Adjusted Sum of Squares: Y	0.61	83.53	84.14
Degrees of Freedom for			
Adjusted Sum of Squares	1.00	108.00	109.00
Variance Estimates	0.61	0.77	
$F=0.78449$			
Adjusted Mean of $Y_1$ :	-0.047717	Tutored	
Adjusted Mean of $Y_2$ :	0.24157	Non-Tutored	

Members of the Division of Research and Development conducted a study of the effectiveness and acceptability of the reading and arithmetic program in 1971-72 in each elementary school. The findings concerning Thomasville Heights are presented in Table 6 (Reading) and Table 7 (Arithmetic).

TABLE 6

PROFILE OF EFFECTIVENESS AND ACCEPTABILITY  
OF THE READING PROGRAM 1971-72

<u>Grade</u>	<u>Gain</u>		<u>Gain Rate of Effectiveness</u>	<u>Index of Acceptability</u>
	<u>Actual</u>	<u>Predicted</u>		
2	0.3	0.3	100	67
3	0.2	0.3	67	59
4	---	---	---	64
5	0.0	0.6	0	63
6	0.4	0.2	200	61
7	-0.2	0.2	-100	53
Average			53	61

Note: The fourth grade took only the posttest, so it was not included in this report.

TABLE 7

PROFILE OF EFFECTIVENESS AND ACCEPTABILITY  
OF THE ARITHMETIC PROGRAM 1971-72

<u>Grade</u>	<u>Gain</u>		<u>Gain Rate of Effectiveness</u>	<u>Index of Acceptability</u>
	<u>Actual</u>	<u>Predicted</u>		
2	0.3	0.3	100	59
3	0.5	0.3	167	68
4	---	---	---	74
5	0.2	0.3	67	84
6	0.3	0.2	150	76
7	0.3	0.4	75	75
Average			112	73

These data show the actual and predicted gains, the gain rate of effectiveness, and the index of acceptability over the 1971-72 school year. The predictions were made on the basis of six factors, namely: per cent of attendance, stability of pupil enrollment, per cent of paid lunches, per cent of pupil ratio, pretest scores on the MAT, and the per cent of pupils passing. The predicted gain for each grade (except the fifth) in reading was less than the expected gain of six months between the pretest and the posttest. The predictions were made considering the degree to which the influencing factors were present in the school. Therefore, the gain rate of effectiveness shown in Tables 6 and 7 differs from the expected gain shown in Table 3.

The index of acceptability was obtained by comparing the actual posttest score to the national norm (one month gain for one month of instruction).

According to these data the reading program was most effective in the second and sixth grades; and the arithmetic program was most effective in the second, third, and sixth grades. The effectiveness of the total school program in reading was very low and the pupils were performing at only 61 per cent of the national norm. Efforts should be made to strengthen the effectiveness of the reading program so as to raise the level of acceptability. In the arithmetic program the level of effectiveness was very high and the pupils were performing at 73 per cent of the national norm. If this high level of effectiveness is maintained, the level of acceptability will rise also; thus moving the pupils toward the national norm.

#### Self-Concept

To assess this variable the Self-Appraisal Inventory (SAI) developed by the Instructional Objectives Exchange, was administered to 40 pupils in the first and second grades. According to the data the pupils had an acceptable level of self-esteem, that is, the pupils scored positively more than 50 per cent of the time in all of the four aspects of self-concept (peer relations, family interactions, scholastic endeavors, and general view of self) as measured by this instrument. These data, presented in Table 8, will be used as baseline data in the longitudinal study of the instructional program.

TABLE 8

PER CENT OF POSITIVE RESPONSES ON THE  
SELF-APPRAISAL INVENTORY  
N = 40

Subscales			
<u>Peer</u>	<u>Family</u>	<u>Scholastic</u>	<u>General</u>
63.0	60.0	65.0	76.0

## Attitude Toward School

The data obtained when the School Sentiment Index (SSI) developed by the Instructional Objectives Exchange, was administered to 40 pupils in the first and second grade are presented in Table 9. These data show that the pupils had positive attitudes toward teachers, behavior, peer relationships, school subjects, the school as a social center, and general orientation to school. These baseline data will be used in a longitudinal study which should reveal any identifiable trend.

## Openness of School Climate

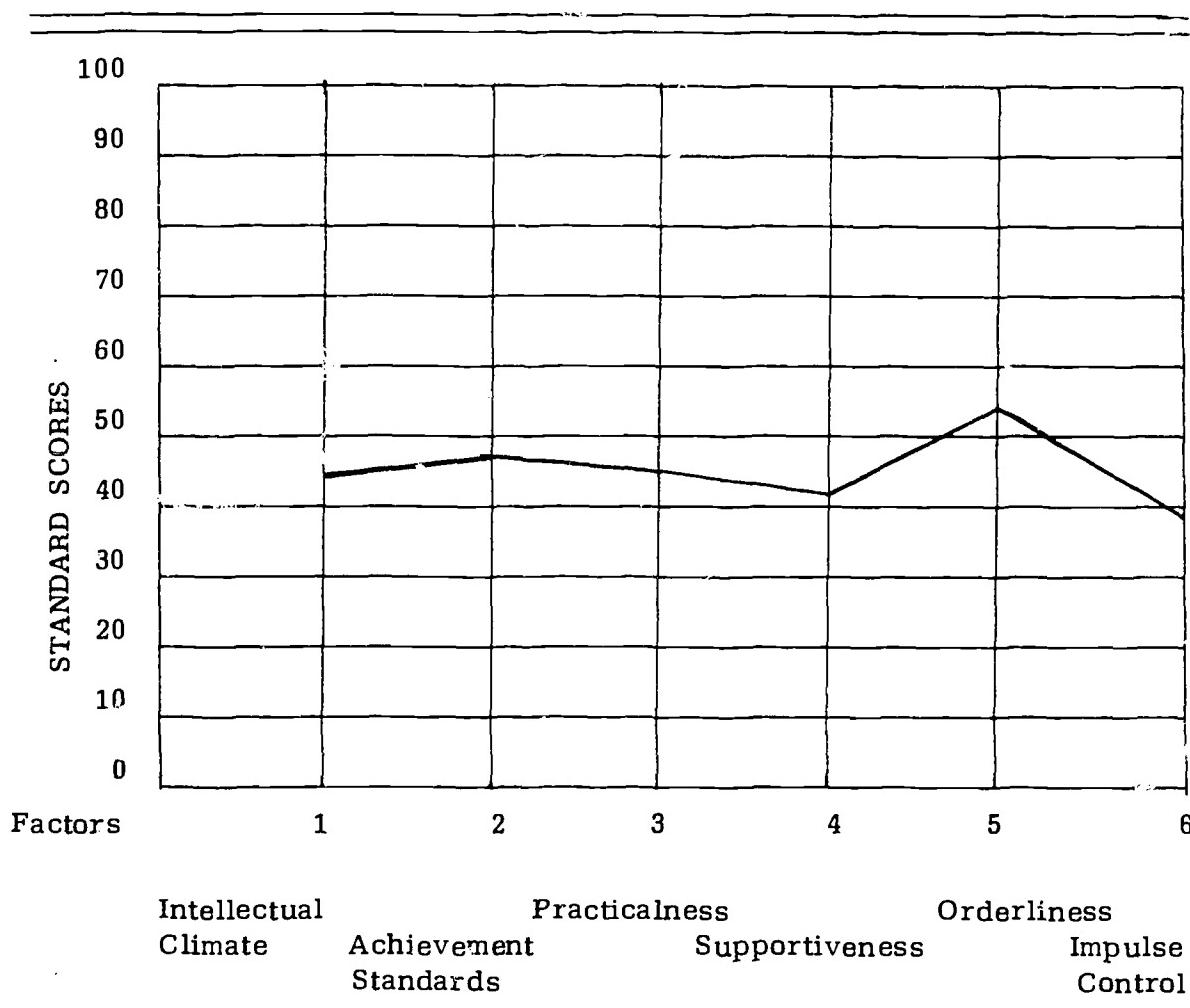
A random sample of teachers was asked to complete, anonymously, the Organizational Climate Index (OCI) developed by George Stern of Syracuse University.

The OCI presents the respondent with 300 statements which he is to answer true or false as applicable to his school. After compilation, the items on the OCI provide data from the respondent on 30 need-press scales postulated by Henry A. Murray and his associates at Harvard University in 1938. Further analysis of these data produces six OCI factors which are called first-order factors. The first five first-order factors describe a second order factor called "development press" which is the capacity of the organizational environment to support, satisfy, or reward self-actualizing behavior. Another second-order factor, "control press" described by impulse control, refers to those characteristics of the environment which inhibit or restrict personal expressiveness. A copy of Murray's Need Press Scales and a copy of the six OCI factors with their definitions are presented in the Appendix.

TABLE 9  
 PER CENT OF POSITIVE RESPONSES ON THE  
SCHOOL SENTIMENT INDEX  
 N=40

Subscales				
<u>Teacher</u>	<u>Peer</u>	<u>School Subjects</u>	<u>General</u>	<u>School Climate</u>
64.0	64.0	80.0	66.0	63.0

TABLE 10  
 SCHOOL PROFILE OF STANDARD FACTOR SCORES ON  
THE ORGANIZATIONAL CLIMATE INDEX  
 1971-72



Presented in Table 10 are data on the organizational climate at Thomasville for the 1971-72 school year. According to the data, the teachers viewed the climate as being somewhat open. The scores ranged near the mean which indicates a supportive atmosphere.

The COP objectives were not evaluated in this report due to the fact the COP participant worked with all pupils in the second grade. However, the second grade did perform higher in reading than did any of the other grades. Gains in reading, self-concept, and openness of school climate will be compared in a separate report with schools in which non-COP teams taught.

The teachers in grades one through seven were released for planning by the IAP staff, consequently, the gain by grades could not be compared to show the effects of IAP. Thomasville's gains were compared to other IAP school's in a the IAP final report.

Despite the services provided by the special projects, the pupils in neither grade achieved the gain set in the objective. However, two grades (second and sixth) scored within the range of effectiveness. Opinions expressed by the faculty indicated that the projects' contributions were valuable to the program.

#### COST ANALYSIS

The data presented in Table 11 show the relative cost for a one-grade-unit of gain based on the rate of reading gain in FY '72 and the amount of funds spent. In order to compute these costs, expenditures were taken from the General Funds Report, June, 1972, and the Trust and Agency Report, June, 1972. From these figures estimates were made of the per-pupil cost from general funds and special projects (compensatory funds). These data also show the cost in compensatory funds for each unit of effectiveness -- effectiveness as determined in the Effectiveness-Acceptability Study, 1972. The reader is cautioned that these data are not exact or refined; rather, broad estimates were made based upon information obtained from the school staff relative to the utilization of resources.

According to these data the cost for one-grade-unit of gain was not related to the amount of funds spent. The per-pupil cost of each grade reported was similar. Based on pupil performance the cost of one-grade-unit of gain for the sixth grade was more than seven times greater than the cost in the second grade and

TABLE 11  
COST ANALYSIS OF READING GAINS  
TOTAL AVERAGE DAILY ATTENDANCE (ADA)  
K-7 = 822

	<u>Grade 2</u>	<u>Grade 3</u>	<u>Grade 4</u>	<u>Grade 5</u>	<u>Grade 6</u>	<u>Grade 7</u>	<u>AVERAGE</u>
ADA	108.0	113.0	92.0	129.0	103.0	98.0	107.0
<b>Per-Pupil Cost</b>							
<b>General Funds</b>							
Regular							
Salary	\$ 457.58	\$ 457.58	\$ 457.58	\$ 457.58	\$ 457.58	\$ 457.58	\$ 457.58
Non-Salary	109.78	109.78	109.78	109.78	109.78	109.78	109.78
Total	\$ 567.36	\$ 567.36	\$ 567.36	\$ 567.36	\$ 567.36	\$ 567.36	\$ 567.36
CIP							
Salary	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05
Non-Salary	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Total	\$ 0.68	\$ 0.68	\$ 0.68	\$ 0.68	\$ 0.68	\$ 0.68	\$ 0.68
Total General Funds							
Salary	\$ 457.63	\$ 457.63	\$ 457.63	\$ 457.63	\$ 457.63	\$ 457.63	\$ 457.63
Non-Salary	110.41	110.41	110.41	110.41	110.41	110.41	110.41
Total	\$ 568.04	\$ 568.04	\$ 568.04	\$ 568.04	\$ 568.04	\$ 568.04	\$ 568.04
<b>Compensatory Funds</b>							
Model Cities							
Salary	\$ 0.74	\$ 0.74	\$ 0.74	\$ 0.74	\$ 0.74	\$ 0.74	\$ 0.74
ESAP							
Salary	\$ 4.54	\$ 4.54	\$ 4.54	\$ 4.54	\$ 4.54	\$ 4.54	\$ 4.54
Title I							
Salary	\$ 50.36	\$ 50.36	\$ 50.36	\$ 50.36	\$ 50.36	\$ 50.36	\$ 50.36
Non-Salary	1.67	1.67	1.67	1.67	1.67	1.67	1.67
Total	\$ 52.03	\$ 52.03	\$ 52.03	\$ 52.03	\$ 52.03	\$ 52.03	\$ 52.03
Title II							
Non-Salary	\$ 21.36	\$ 21.36	\$ 21.36	\$ 21.36	\$ 21.36	\$ 21.36	\$ 21.36
COP							
Non-Salary (Tuition)	\$ 3.09	\$ 3.09	\$ 3.09	\$ 3.09	\$ 3.09	\$ 3.09	\$ 3.09
Total Compensatory Funds							
Salary	\$ 55.64	\$ 55.64	\$ 55.64	\$ 55.64	\$ 55.64	\$ 55.64	\$ 55.64
Non-Salary	26.12	26.12	26.12	26.12	26.12	26.12	26.12
Total	\$ 81.76	\$ 81.76	\$ 81.76	\$ 81.76	\$ 81.76	\$ 81.76	\$ 81.76
<b>Total Per-Pupil Cost</b>							
General Funds	\$ 568.04	\$ 568.04	\$ 568.04	\$ 568.04	\$ 568.04	\$ 568.04	\$ 568.04
Compensatory Funds	81.76	81.76	81.76	81.76	81.76	81.76	81.76
Total	\$ 649.80	\$ 649.80	\$ 649.80	\$ 649.80	\$ 649.80	\$ 649.80	\$ 649.80
<b>Rate of Reading Gain</b>							
(Per Cent)	68.0	47.0	---	39.0	09.0	-10.0	32.0
<b>Projected Cost for One-Grade-Unit of Gain</b>							
General Funds	\$ 835.35	\$ 1208.60	\$ -0-	\$ 1456.51	\$ 6311.56	\$ -0-	\$ 1775.12
Compensatory Funds	120.24	173.96	-0-	209.64	908.44	-0-	255.50
Total	\$ 955.59	\$ 1382.56	\$ -0-	\$ 1666.15	\$ 7220.00	\$ -0-	\$ 2030.62
<b>Gain Rate of Effectiveness</b>							
	100.0	67.0	---	0.0	200.0	-100.0	53.0
<b>Expenditures (per ADA) of Compensatory Funds for</b>							
Each Unit of Effectiveness	\$ 0.82	\$ 1.22	\$ -0-	\$ 0.41	\$ -0-	\$ 0.82	

more than four times greater than the cost in the third and fifth grades. The cost of one-grade-unit of gain was not computed in the kindergarten, first, and fourth grades because the testing program did not yield grade unit gains for those grades. It was impossible to project the cost of one-grade-unit of gain for the seventh grade because of the negative gains (losses) that were made by pupils in that particular grade.

## CONCLUSIONS

The objective that first grade pupils who scored "C" or above on the Metropolitan Readiness Tests (MRT) would score 1.6 or above on the Metropolitan Achievement Tests (MAT) was not met. The pupils who scored low on the pretest performed nearly as well as those pupils who scored "average" and "above average".

The average gain of pupils in grades two, three, five, six, and seven did not meet the objective of a one-month gain for each month of instruction (six months total). Nor did either of these grades meet the objective that 80 per cent of the pupils would gain six months between pretest and posttest.

According to the predictions of performance based on the formula to determine the gain rate of effectiveness, the average reading performance of pupils in grades two through seven was low. Only grades two and six performed as predicted, while the performance of the pupils in the seventh grade showed a negative gain equal to the predicted gain.

According to the prediction of performance based on the formula to determine the gain rate of effectiveness, the average performance in arithmetic of pupils in grades two through seven was slightly better than the prediction. Only the pupils in grades five and seven performed lower than the predictions. The performance of pupils in the second grade was equal to the prediction, and the performance of pupils in grades three and six was much higher than the predictions.

In summary, the pupils in the grades included in the study of effectiveness and acceptability performed better in arithmetic than in reading. The overall average performance of the pupils was at three-fifths of the national norms in reading and three-fourths of the national norms in arithmetic.

Pupils in general had an acceptable level of self-esteem in peer relationships, scholastic endeavors, family interactions, and general view of themselves, which were all the factors measured with the self-appraisal instrument.

The over all organizational climate of the school was viewed as being open during this the initial year of operation. The school's score was near the mean on each factor.

The amount of funds spent seemingly did not relate significantly to the achievement of pupils. The per-pupil cost was basically the same in compensatory and general funds in each grade, yet the level of effectiveness varied tremendously among the grades.

There was no significant correlation between attendance and the reading gain scores of the S<sub>3</sub> groups.

The effects of the Youth-Tutoring-Youth program were not evidenced in the performance of the pupils who participated.

#### RECOMMENDATIONS

Based upon the finding of this study, it is recommended that:

- A. The faculty continue its efforts to provide innovative and effective learning experiences designed to meet the needs of the pupils.
- B. Specific plans be devised and followed to concentrate the services provided through compensatory funds so that maximum results may be obtained.
- C. Special consideration be given to adapting practices which yielded results in certain grades to application in grades where performance lagged.

The faculty is to be commended for its efforts, and concern in initiating an effective instructional program. This being a beginning year, no trends have been identified. Therefore, through inquiry into causes for low performances, and continuous efforts to improve pupil performance, weaknesses can be identified early and strengthened.

## **APPENDIX**

MURRAY'S NEED-PRESS SCALE  
DEFINITIONS OF SCALES FROM WHICH DEVELOPMENT  
PRESS AND CONTROL PRESS ARE DERIVED  
IN THE ORGANIZATIONAL CLIMATE INDEX

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1. Abasement-assurance: self-deprecation versus self-confidence.
  2. Achievement: striving for success through personal effort.
  3. Adaptability-defensiveness: acceptance of criticism versus resistance to suggestion.
  4. Affiliation-rejection: friendliness versus unfriendliness.
  5. Agression-blame avoidance: hostility versus disorganization.
  
  6. Change-sameness: flexibility versus routine.
  7. Conjunctivity-disjunctivity: planfulness versus organization.
  8. Counteraction-inferiority avoidance: restraining after failure versus withdrawn.
  9. Deference-restriveness: respect for authority versus rebelliousness.
  10. Dominance-tolerance: ascendancy versus forebearance.
  
  11. Ego Achievement: striving for power through social action.
  12. Emotionality-placidity: expressiveness versus restraint.
  13. Energy-passivity: effort versus inertia.
  14. Exhibitionism-inferiority avoidance: attention-seeking versus shyness.
  15. Fantasied achievement: daydreams of extraordinary public recognition.
  
  16. Harm avoidance -- risk-taking: fearfulness versus thrill seeking.
  17. Humanities-social sciences: interests in the humanities and the social science.
  18. Impulsiveness-deliberation: impetuosity versus reflection.
  19. Narcissism: vanity.
  20. Nurturance-rejection: helping others versus indifference.
  
  21. Objectivity-projectivity: detachment versus superstition (AI) or suspicion (CI).
  22. Order-disorder: compulsive organization of details versus carelessness.
  23. Play-work: pleasure-seeking versus purposefulness.
  24. Practicalness-impracticalness: interest in practical activities versus indifference.
  25. Reflectiveness: introspective contemplation.
  
  26. Science: interest in the natural sciences.
  27. Sensuality-puritanism: interest in sensory and aesthetic experiences.
  28. Sexuality-prudishness: heterosexual interests versus inhibitions of heterosexual interests.
  29. Supplication-autonomy: dependency versus self-reliance.
  30. Understanding: intellectuality.
-

## ORGANIZATIONAL CLIMATE INDEX FACTORS

### Development Press

- A. Intellectual climate -- This factor describes a concern with intellectual activity, social action, and personal effectiveness. It is based on the scales for humanities, social science, science, reflectiveness, understanding, fantasied achievement, exhibitionism, and change. A school that scores high on this factor is one in which the teachers feel that there is a high degree of intellectuality, heterosexual interests, flexibility, and attention seeking.
- B. Achievement standards -- This is the factor reflecting press for achievement. Schools high on this factor stress hard work, perseverance, and a total day-by-day commitment to institutional purposes. It is defined by counteraction, energy, achievement, emotionality, and ego achievement.
- C. Practicalness -- This factor suggests an environmental dimension of practicality tempered with friendliness. It is defined by practicalness and nurturance. A school that scores high on this factor is one in which the teachers feel there is a high interest in practical activity and a desire for helping others.
- D. Supportiveness -- This factor deals with aspects of the organizational environment that respect the integrity of the teacher as a person, but the implication is that dependency needs must be supported rather than personal autonomy emphasized. It might be considered a measure of democratic paternalism. The scales defining it are assurance, tolerance, objectivity, affiliation, conjunctivity, supplication, blame avoidance, harm avoidance, and nurturance. A school that scores high on this factor is one in which the teachers feel a high degree of self-confidence, friendliness, and planfulness.
- E. Orderliness -- The components of this factor are concerned with the press for organizational structure, procedure, orderliness, and a respect for authority. Conformity to community pressures and an effort to maintain a proper institutional image probably are also concomitants of a high score on this factor. It is based on order, narcissism,

adaptability, conjunctivity, harm avoidance, and deference. A school that scores high on this factor is one in which the teachers feel there is a compulsive organization of details, acceptance of criticism, respect for authority, vanity, and planfulness.

#### Control Press

In addition to the reflection of factors 1 and 2 under "Development Press," Control Press involves:

Impulse control - This factor implies a high level of constraint and organizational restriveness. There is little opportunity for personal expression or for any form of impulsive behavior. It is based on work instead of play; prudishness versus sexuality; aggression versus blame avoidance; impulsiveness versus deliberation; emotionality versus placidity; and exhibitionism versus inferiority avoidance. A school that scores high on this factor is one in which the teachers feel there is a high degree of purposefulness, heterosexual interests, hostility, impetuosity, expressiveness, and restraining after failure.